TITLE 180 CONTROL OF RADIATION

CHAPTER 3 LICENSING OF RADIOACTIVE MATERIAL

FORMS

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Copies of the Code of Federal Regulations (CFR) cited in this Chapter are available for inspection at the Department of Health and Human Services Regulation and Licensure, 301 Centennial Mall South, 3rd Floor, Lincoln, Nebraska.

10 CFR 1 through 199 (January 1, 2002)

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TITLE 180 CONTROL OF RADIATION

CHAPTER 3 LICENSING OF RADIOACTIVE MATERIAL

3-001 SCOPE AND AUTHORITY

3-001.01 180 NAC 3 provides for the licensing of radioactive material. No person will receive, possess, use, transfer, own or acquire radioactive material except as authorized in a specific or general license issued pursuant to 180 NAC 3 or as otherwise provided in 180 NAC 3. The regulations are authorized by and implement the Nebraska Radiation Control Act, Neb. Stat. Rev. §§ 71-3501 to 3519.

3-001.02 In addition to the requirements of 180 NAC 3, all licensees are subject to the requirements of 180 NAC 1, 4, 13, 15, 17, and 18. Licensees engaged in industrial radiographic operations are subject to the requirements of 180 NAC 5, licensees using sealed and unsealed sources in the healing arts are subject to the requirements of 180 NAC 7, licensees engaged in the management of radioactive waste are subject to the requirements of 180 NAC 12, licensees engaged in well logging and subsurface tracer studies are subject to the requirements of 180 NAC 14, and licensees using sealed sources containing radioactive materials in irradiators are subject to the requirements of 180 NAC 19.

3-001.03 10 Code of Federal Regulations (CFR), as published on January 1, 2002 and referred throughout this Chapter are herein incorporated by reference and available for viewing at the Nebraska Department of Health and Human Services Regulation and Licensure, Public Health Assurance Division, 301 Centennial Mall South, 3rd Floor, Lincoln, Nebraska 68509.

3-002 DEFINITIONS: As used in 180 NAC 3.

Alert means events may occur, are in progress, or have occurred that could lead to a release of radioactive material but that the release is not expected to require a response by offsite response organizations to protect persons offsite.

Principal activities means activities authorized by the license which are essential to achieving the purpose(s) for which the license was issued or amended. Storage during which no license material is accessed for use or disposal and activities incidental to decontamination or decommissioning are not principal activities.

Site area emergency means events may occur, are in progress, or have occurred that could lead to a significant release of radioactive material and that could require a response by offsite response organizations to protect persons offsite.

EXEMPTIONS

3-003 SOURCE MATERIAL

3-003.01 Any person is exempt from 180 NAC 3 to the extent that the person receives, possesses, uses, owns, or transfers source material in any chemical mixture, compound, solution, or alloy in which the source material is by weight less than 1/20 of 1 % (0.05 %) of the mixture, compound, solution, or alloy.

3-003.02 Any person is exempt from 180 NAC 3 to the extent that such person receives, possesses, uses, or transfers unrefined and unprocessed ore containing source material; provided that, except as authorized in a specific license, the person must not refine or process such ore.

3-003.03 Any person is exempt from 180 NAC 3 to the extent that the person receives, possesses, uses, or transfers:

1. Any quantities of thorium contained in:

   a. incandescent gas mantles,
   b. vacuum tubes,
   c. welding rods,
   d. electric lamps for illuminating purposes provided that each lamp does not contain more than 50 milligrams of thorium,
   e. germicidal lamps, sunlamps, and lamps for outdoor or industrial lighting provided that each lamp does not contain more than 2 grams of thorium,
   f. rare earth metals and compounds, mixtures, and products containing not than 0.25% by weight thorium, uranium, or any combination of these, or
   g. personnel neutron dosimeters, provided that each dosimeter does not contain more than 50 milligrams of thorium;

2. Source material contained in the following products:

   a. glazed ceramic tableware, provided that the glaze contains not more than 20% by weight source material,
   b. glassware, containing not more than 10% by weight source material, but not including commercially manufactured glass brick, pane glass, ceramic tile or other glass, or ceramic used in construction,
   c. glass enamel or glass enamel frit containing not more than 10% by weight source material imported or ordered for importation into the United States, or initially distributed by manufacturers in the United States, before July 25, 1983,[1] or
   d. piezoelectric ceramic containing not more than 2% by weight source material;

3. Photographic film, negatives, and prints containing uranium or thorium;

[1]On July 25, 1983, the exemption of glass enamel or glass enamel frit was suspended. The exemption was eliminated on September 11, 1984.

4. Any finished product or part fabricated of, or containing, tungsten-thorium or magnesium-thorium alloys, provided that the thorium content of the alloy does not exceed 4% by weight and that the exemption contained in this subpart does not authorize the chemical, physical, or metallurgical treatment or processing of any such product or part;

5. Uranium contained in counterweights installed in aircraft, rockets, projectiles, and missiles, or stored or handled in connection with installation or removal of such counterweights, provided that:

   a. the counterweights are manufactured in accordance with a specific license issued by the U.S. Nuclear Regulatory Commission, authorizing distribution by the licensee pursuant to 10 CFR Part 40;
   b. each counterweight has been impressed with the following legend clearly legible through any plating or other covering: "DEPLETED URANIUM",[2]
   c. each counterweight is durably and legibly labeled or marked with the identification of the manufacturer and the statement: "UNAUTHORIZED ALTERATIONS PROHIBITED",[3] and
   d. the exemption contained in this division does not authorize the chemical, physical, or metallurgical treatment or processing of any such counterweights other than repair or restoration of any plating or other covering;

6. Natural or depleted uranium metal used as shielding constituting part of any shipping container, provided that:

   a. The shipping container is conspicuously and legibly impressed with the legend "CAUTION - RADIOACTIVE SHIELDING - URANIUM", and
   b. The uranium metal is encased in mild steel or equally fire resistant metal of minimum wall thickness of one-eighth inch (3.2mm).

7. Thorium contained in finished optical lenses, provided that each lens does not contain more than 30% by weight of thorium, and that the exemption does not authorize either:

   a. the shaping, grinding, or polishing of such lens or manufacturing processes other than the assembly of such lens into optical systems and devices without any alteration of the lens, or
   b. the receipt, possession, use, or transfer of thorium contained in contact lenses, or in spectacles, or in eyepieces in binoculars or other optical instruments;

[2]The requirements specified in 180 NAC 3-003.03, items 5.b. and 5.c. need not be met by counter weights manufactured prior to December 31, 1969; provided, that such counter weights are impressed with the legend, "CAUTION, RADIOACTIVE MATERIAL - URANIUM", as previously required by Title 180.

[3]Ibid. p. 3

8. Uranium contained in detector heads for use in fire detection units, provided that each detector head contains not more than 185 Bq (0.005 microcurie) of uranium; or

9. Thorium contained in any finished aircraft engine part containing nickel-thoria alloy, provided that:

   a. the thorium is dispersed in the nickel-thoria alloy in the form of finely divided thoria (thorium dioxide), and
   b. the thorium content in the nickel-thoria alloy does not exceed 4% by weight.

3-003.04 The exemptions in 180 NAC 3-003.03 do not authorize the manufacture of any of the products described.

3-004 RADIOACTIVE MATERIAL OTHER THAN SOURCE MATERIAL

3-004.01 Exempt Concentrations.

1. Except as provided in 3-004.01, item 2 any person is exempt from this 180 NAC 3 to the extent that such person receives, possesses, uses, transfers, owns or acquires products containing radioactive material introduced in concentrations not in excess of those listed in 180 NAC 3, appendix 3-A.
2. No person may introduce radioactive material into a product or material knowing or having reason to believe that it will be transferred to persons exempt under 180 NAC 3-004.01, item 1 or equivalent regulations of the U.S. Nuclear Regulatory Commission, or any Agreement State, except in accordance with a specific license issued pursuant to 180 NAC 3-014.01 or the general license provided in 180 NAC 3-028.

3-004.02 Exempt Quantities.

1. Except as provided in 180 NAC 3-004.02 , items 2 and 3., any person is exempt from Title 180 to the extent that such person receives, possesses, uses, transfers, owns, or acquires radioactive material in individual quantities each of which does not exceed the applicable quantity set forth in 180 NAC 3, Appendix 3-B.
2. 180 NAC 3-004.02 does not authorize the production, packaging or repackaging of radioactive material for purposes of commercial distribution, or the incorporation of radioactive material into products intended for commercial distribution.
3. No person may, for purposes of commercial distribution, transfer radioactive material in the individual quantities set forth in 180 NAC 3, Appendix 3-B knowing or having reason to believe that such quantities of radioactive material will be transferred to persons exempt under 180 NAC 3-004.02 or equivalent regulations of the U.S. Nuclear Regulatory Commission, or any Agreement State, except in accordance with a specific license issued by the U.S. Nuclear Regulatory Commission pursuant to § 32.18 of 10 CFR Part 32 or by the Agency pursuant to 180 NAC 3-014.02 which license states that the radioactive material may be transferred by the licensee to persons exempt under 180 NAC 3-004.02 or the equivalent regulations of the U.S. Nuclear Regulatory Commission, or any Agreement State.

3-004.03 Exempt Items.

1. Certain Items Containing Radioactive Material. Except for persons who apply radioactive material to, or persons who incorporate radioactive material into the following products, any person is exempt from Title 180 to the extent that he receives, possesses, uses, transfers, owns, or acquires the following products:

   a. Timepieces or hands or dials containing not more than the following specified quantities of radioactive material and not exceeding the following specified radiation dose rate:

      (1) 925 MBq (25 millicuries) of tritium per timepiece.
      (2) 185 MBq (5 millicuries) of tritium per hand.
      (3) 555 MBq (15 millicuries) of tritium per dial (The Agency considers bezels when used to be part of the dial).
      (4) 3.7 MBq (100 microcuries) of promethium-147 per watch or 7.4 MBq (200 microcuries) of promethium-147 per any other timepiece.
      (5) 0.74 MBq (20 microcuries) of promethium-147 per watch hand or 1.48 MBq (40 microcuries) of promethium-147 per other timepiece hand.
      (6) 2.22 MBq (60 microcuries) of promethium-147 per watch dial or 4.44 MBq (120 microcuries) of promethium-147 per other timepiece dial (bezels when used will be considered as part of the dial).
      (7) 1.11 kBq (0.03 microcurie) of radium per hand.
      (8) 3.33 kBq (0.09 microcurie) of radium per dial (when used bezels will be considered as part of the dial).
      (9) The radiation dose rate from hands and dials containing promethium-147 will not exceed the following, when measured through 50 milligrams per square centimeter of absorber:

         (a) For wrist watches, 1 μGy (0.1 millirad) per hour at 10 centimeters from any surface.
         (b) For pocket watches, 1 μGy (0.1 millirad) per hour at 1 centimeter from any surface.
         (c) For any other timepiece, 2 μGy (0.2 millirad) per hour at 10 centimeters from any surface.

      (10) 37 kBq (one microcurie) of radium-226 per timepiece in timepieces acquired prior to August 22, 1982.

   b. Lock illuminators containing not more than 555 MBq (15 millicuries) of tritium or not more than 74 MBq (2 millicuries) of promethium-147 installed in automobile locks. The radiation dose rate from each lock illuminator containing promethium-147 will not exceed 10 μGy (1 millirad) per hour at 1 centimeter from any surface when measured through 50 milligrams per square centimeter of absorber.
   c. Precision balances containing not more than 37 MBq (1 millicurie) of tritium per balance or not more than 18.5 MBq (0.5 millicurie) of tritium per balance part.
   d. Automobile shift quadrants containing not more than 925 MBq (25 millicuries) of tritium.

e. Marine compasses containing not more than 27.8 GBq (750 millicuries) of tritium gas and other marine navigational instruments containing not more than 9.25 GBq (250 millicuries) of tritium gas.

f. Thermostat dials and pointers containing not more than 925 MBq (25 millicuries) of tritium per thermostat.

g. Electron tubes; provided, that each tube does not contain more than one of the following specified quantities of radioactive material:

(1) 5.55 GBq (150 millicuries) of tritium per microwave receiver protector tube or 370 MBq (10 millicuries) of tritium per any other electron tube.
(2) 37 kBq (1 microcurie) of cobalt-60.
(3) 185 kBq (5 microcuries) of nickel-63.
(4) 1.11 MBq (30 microcuries) of krypton-85.
(5) 185 kBq (5 microcuries) of cesium-137.
(6) 1.11 MBq (30 microcuries) of promethium-147.

And provide further, that the levels of radiation from each electron tube containing radioactive material will not exceed 10 μGy (1 millirad) per hour at 1 centimeter from any surface when measured through 7 milligrams per square centimeter of absorber.[4]

h. Ionizing radiation measuring instruments containing, for purposes of internal calibration or standardization, one or more sources of radioactive material provided that:

(1) Each source contains no more than one exempt quantity set forth in 180 NAC 3, Appendix 3-B, and
(2) Each instrument contains no more than 10 exempt quantities. An instrument's source(s) may contain either one type or different types of radionuclides and an individual exempt quantity may be composed of fractional parts of one or more of the exempt quantities in 180 NAC 3, Appendix 3-B provided that the sum of such fractions does not exceed unity.
(3) For americium-241, 1.85 kBq (0.05 microcurie) is considered an exempt quantity under180 NAC 3-004.03, item 1.h.

i. Spark gap irradiators containing not more than 37 kBq (1 microcurie) of cobalt-60 per spark gap irradiator for use in electrically ignited fuel oil burners having a firing rate of at least 3 gallons (11.4 liters) per hour.

2. Self-luminous products containing radioactive material.

[4]For purposes of this division, "electron tubes" include spark gap tubes, power tubes, gas tubes including glow lamps, receiving tubes, microwave tubes, indicator tubes, pickup tubes, radiation detection tubes, and any other completely sealed tube that is designed to conduct or control electrical currents.

a. Tritium, krypton-85, or promethium-147. Except for persons who manufacture, process, or produce self-luminous products containing tritium, krypton-85, or promethium-147, any person is exempt from Title 180 to the extent that such person receives, possesses, uses, transfers, owns, or acquires tritium, krypton-85 or promethium-147 in self-luminous products manufactured, processed, produced, imported, or transferred in accordance with a specific license issued by the U.S. Nuclear Regulatory Commission pursuant to § 32.22 of 10 CFR Part 32, which license authorizes the transfer of the product to persons who are exempt from regulatory requirements. The exemption in 180 NAC 3-004.03, item 2 does not apply to tritium, krypton-85, or promethium-147 used in products for frivolous purposes or in toys or adornments.

b. Radium-226. Any person is exempt from Title 180 to the extent that such person receives, possesses, uses, transfers, or owns articles containing less than 3.7 kBq (0.1 microcuries) of radium-226 which were acquired prior to August 22, 1982.

3. Gas and aerosol detectors containing radioactive material.

a. Except for persons who manufacture, process, or produce gas and aerosol detectors containing radioactive material, any person is exempt from Title 180 to the extent that such person receives, possesses, uses, transfers, owns, or acquires radioactive material in gas and aerosol detectors designed to protect life or property from fires and airborne hazards provided that detectors containing radioactive material must have been manufactured, imported, or transferred in accordance with a specific license issued by the U.S. Nuclear Regulatory Commission pursuant to § 32.26 of 10 CFR Part 32, or an Agreement State, pursuant to180 NAC 3-014.03, which authorizes the transfer of the detectors to persons who are exempt from regulatory requirements.

b. Gas and aerosol detectors previously manufactured and distributed to general licensees in accordance with a specific license issued by an Agreement State are considered exempt under 180 NAC 3-004.03, item 1., provided that the device is labeled in accordance with the specific license authorizing distribution of the generally licensed device, and provided further that they meet the requirements of 180 NAC 3-014.03.

4. Resins Containing Scandium-46 and Designed for Sand Consolidation in Oil Wells. Any person is exempt from Title 180 to the extent that such person receives, possesses, uses, transfers, owns or acquires synthetic plastic resins containing scandium-46 which are designed for sand consolidation in oil wells. Such resins must have been manufactured or imported in accordance with a specific license issued by the U.S. Nuclear Regulatory Commission, or must have been manufactured in accordance with the specifications contained in a specific license issued by the Agency or any Agreement State to the manufacturer of such resins pursuant to licensing requirements equivalent to those in §s 32.16 and 32.17 of 10 CFR Part 32 of the regulations of the U.S. Nuclear Regulatory Commission. This exemption does not authorize the manufacture of any resins containing scandium-46.

LICENSES

3-005 TYPES OF LICENSES: Licenses for radioactive materials are of two types: general and specific:

3-005.01 General licenses provided in 180 NAC 3 are effective without the filing of applications with the Agency or the issuance of licensing documents to the particular persons. However, registration or certification with the Agency may be required by the particular general license. The general licensee is subject to all other applicable portions of Title 180 and any limitations based on the type and quantity of radioactive material of the general license.

3-005.02 Specific licenses require the submission of an application to the Agency and the issuance of a licensing document by the Agency. The licensee is subject to all applicable portions of Title 180 as well as any limitations based on quantities and types of radioactive materials, proposed use and upon the training and experience of the user(s) specified in the licensing document.

3-006 RADIOACTIVE DRUG: CAPSULES CONTAINING CARBON-14 UREA FOR "IN-VIVO" DIAGNOSTIC USE FOR HUMANS

3-006.01 Except as provided in 180 NAC 3-006.02 and 180 NAC 3-006.03, any person is exempt from the requirements for a license set forth in the Act and from the regulations in 180 NAC 3 and 7 provided that such person receives, possesses, uses, transfers, owns or acquires capsules containing 37 kBq (1μCi) carbon-14 urea (allowing for nominal variation that may occur during the manufacturing process) each for "in vivo" diagnostic use for humans.

3-006.02 Any person who desires to use the capsules for research involving human subjects must apply for and receive a specific license pursuant to 180 NAC 7.

3-006.03 Any person who desires to manufacture, prepare, process, produce, package, repackage, or transfer for commercial distribution such capsules must apply for and receive a specific license from the Nuclear Regulatory Commission pursuant to 10 CFR Chapter 1, Part 32, § 32.21.

3-006.04 Nothing in 180 NAC 3-006 relieves persons from complying with applicable FDA, other Federal, and State requirements governing receipt, administration, and use of drugs.

GENERAL LICENSES

3-007 GENERAL LICENSES - SOURCE MATERIAL

3-007.01 A general license is hereby issued authorizing commercial and industrial firms, research, educational and medical institutions and Federal, State and local government agencies to use and transfer not more than fifteen (15) pounds (6.82 kg) of source material at any one time for research, development, educational, commercial or operational purposes. A person authorized to use or transfer source material, pursuant to this general license, may not receive more than a total of 150 pounds (68.2 kg) of source material in any one calendar year.

3-007.02 Persons who receive, possess, use, or transfer source material pursuant to the general license issued in 180 NAC 3-007.01 are exempt from the provisions of 180 NAC 4 and 10 to the extent that such receipt, possession, use, or transfer is within the terms of such general license; provided, however, that this exemption does not apply to any such person who is also in possession of source material under a specific license issued pursuant to this 180 NAC 3.

3-007.03 A general license is hereby issued authorizing the receipt of title to source material without regard to quantity. This general license does not authorize any person to receive, possess, use, or transfer source material.

3-007.04 Depleted Uranium In Industrial Products and Devices.

1. A general license is hereby issued to receive, acquire, possess, use, or transfer, in accordance with the provisions of 180 NAC 3-007.04 items 2 through 5, depleted uranium contained in industrial products or devices for the purpose of providing a concentrated mass in a small volume of the product or device.

2. The general license in 180 NAC 3-007.04, item 1 applies only to industrial products or devices which have been manufactured either in accordance with a specific license issued to the manufacturer of the products or devices pursuant to 180 NAC 3-014.13 or in accordance with a specific license issued to the manufacturer by the U.S. Nuclear Regulatory Commission or an Agreement State which authorizes manufacture of the products or devices for distribution to persons generally licensed by the U.S. Nuclear Regulatory Commission or an Agreement State.

3. Persons who receive, acquire, possess, or use depleted uranium pursuant to the general license established by 180 NAC 3-007.04, item 1 must:

   a. File Agency Form NRH-11 "Certificate - Use of Depleted Uranium Under General License," with the Agency. The form must be submitted within 30 days after the first receipt or acquisition of such depleted uranium. The registrant must furnish on Agency Form NRH-11 the following information and such other information as may be required by that form:

      (1) Name and address of the general licensee;
      (2) A statement that the general licensee has developed and will maintain procedures designed to establish physical control over the depleted uranium described in 180 NAC 3-007.04, item 1 and designed to prevent transfer of such depleted uranium in any form, including metal scrap, to persons not authorized to receive the depleted uranium; and
      (3) Name and/or title, address, and telephone number of the individual duly authorized to act for and on behalf of the general licensee in supervising the procedures identified in 180 NAC 3-007.04, item 3.a.(2).

   b. Report in writing to the Agency any changes in information furnished by him in Agency Form NRH-11 "Certificate - Use of Depleted Uranium Under General License." The report must be submitted within 30 days after the effective date of such change.

4. A person who receives, acquires, possesses, or uses depleted uranium pursuant to the general license established by 180 NAC 3-007.04, item 1 must:

   a. Not introduce such depleted uranium, in any form, into a chemical, physical, or metallurgical treatment or process, except a treatment or process for repair or restoration of any plating or other covering of the depleted uranium.

   b. Not abandon such depleted uranium.

   c. Transfer or dispose of such depleted uranium only by transfer in accordance with the provisions of 180 NAC 3-025. In the case where the transferee receives the depleted uranium pursuant to the general license established by 180 NAC 3-007.04, item 1, the transferor must furnish the transferee a copy of this regulation and a copy of Agency Form NRH-11. In the case where the transferee receives the depleted uranium pursuant to a general license contained in the U.S. Nuclear Regulatory Commission or Agreement State's regulation equivalent to 180 NAC 3-007.04, item 1, the transferor must furnish the transferee a copy of Title 180 and a copy of Agency Form NRH-11 accompanied by a note explaining that use of the product or device is regulated by the U.S. Nuclear Regulatory Commission or Agreement State under requirements substantially the same as those in Title 180.

   d. Within 30 days of any transfer, report in writing to the Agency the name and address of the person receiving the depleted uranium pursuant to such transfer.

5. Any person receiving, acquiring, possessing, using, or transferring depleted uranium pursuant to the general license established by 180 NAC 3-007.04, item 1 is exempt from the requirements of 180 NAC 4 and 180 NAC 10 with respect to the depleted uranium covered by that general license.

3-007.05 Persons who receive, possess, use, or transfer source material pursuant to the general license in 180 NAC 3-007.01 are prohibited from administering source material, or the radiation therefrom, either externally or internally, to human beings except as may be authorized by the agency in a specific license.

3-008 GENERAL LICENSES - RADIOACTIVE MATERIAL OTHER THAN SOURCE MATERIAL[5]

3-008.01 Certain Devices and Equipment: A general license is hereby issued to transfer, receive, acquire, own, possess, and use radioactive material incorporated in the following devices or equipment which have been manufactured, tested and labeled by the manufacturer in accordance with a specific license issued to the manufacturer by the U.S. Nuclear Regulatory Commission for use pursuant to § 31.3 of 10 CFR Part 31. This general license is subject to the provisions of 180 NAC 1-004 through 009, 180 NAC 3-004.01, item 2, 180 NAC 3-017, 3-025, and 3-026, 3-030, 180 NAC 4,[6] and 180 NAC 10, 13, 17 and 18.

[5]Note: Different general licenses are issued in 180 NAC 3-008, each of which has its own specific conditions and requirements.

[6]Attention is directed particularly to the provisions of 180 NAC 4 which relate to the labeling of containers.

1. Static Elimination Device. Devices designed for use as static eliminators which contain, as sealed source or sources, radioactive material consisting of a total of not more than 18.5 MBq (500 microcuries) of polonium-210 per device.

2. Ion Generating Tube. Devices designed for ionization of air which contain, as a sealed source or sources, radioactive material consisting of a total of not more than 18.5 MBq (500 microcuries) of polonium-210 per device or a total of not more than 1.85 GBq (50 millicuries) of hydrogen-3 (tritium) per device.

3-08.02 Reserved

3-008.03 Reserved

3-008.04 Certain Measuring, Gauging and Controlling Devices[7]

1. A general license is hereby issued to commercial and industrial firms and to research, educational and medical institutions, individuals in the conduct of their business, and state or local government agencies to own, receive, acquire, possess, use or transfer in accordance with the provisions of 180 NAC 3-008.04, items, 2, 3 and 4, radioactive material, excluding special nuclear material, contained in devices designed and manufactured for the purpose of detecting, measuring, gauging or controlling thickness, density, level, interface location, radiation, leakage, or qualitative or quantitative chemical composition, or for producing light or an ionized atmosphere.

2. The general license in 180 NAC 3-008.04, item 1 applies only to radioactive material contained in devices which have been manufactured or initially transferred and labeled in accordance with the specification contained in a specific license issued under 180 NAC 3-014.04; or an equivalent specific license issued by the U. S. Nuclear Regulatory Commission or an Agreement State.

   The devices must have been received from one of the specific licensees described in this paragraph or through a transfer made under 180 NAC 3-008.04, item 3.i.

3. Any person who owns, receives, acquires, possesses, uses, or transfers radioactive material in a device pursuant to the general license in 180 NAC 3-008.04, item 1 must:

   a. Assure that all labels affixed to the device at the time of receipt, and bearing a statement that removal of the label is prohibited, are maintained thereon and comply with all instructions and precautions provided by such labels;

   b. Assure that the device is tested for leakage of radioactive material and proper operation of the on-off mechanism and indicator, if any, at no longer than six-month intervals or at such other intervals as are specified in the label, however,

[7]Persons possessing radioactive material in devices under 180 NAC 3-008.04 before January 1975, may continue to possess, use, or transfer that material in accordance with the labeling requirements of 180 NAC 3-008.04 in effect on January 14, 1975.

(1) Devices containing only krypton need not be tested for leakage of radioactive material, and

(2) Devices containing only tritium or not more than 3.7 MBq (100 microcuries) of other beta and/or gamma emitting material or 0.37 MBq (10 microcuries) of alpha emitting material and devices held in storage in the original shipping container prior to initial installation need not be tested for any purpose;

c. Assure that the tests required by 180 NAC 3-008.04, item 3.b. and other testing, installation, servicing, and removal from installation involving the radioactive materials, its shielding or containment, are performed:

(1) In accordance with the instructions provided by the labels; or

(2) By a person holding an applicable specific license from the Agency, the U.S. Nuclear Regulatory Commission, or an Agreement State to perform such activities;

d. Maintain records showing compliance with the requirements of 180 NAC 3-008.04, items 3.b. and 3.c. The records must show the results of the tests. The records also must show the dates of performance of, and the names of persons performing, testing, installation, servicing, and removal from installation concerning the radioactive material, its shielding or containment. Records of tests for leakage of radioactive material required by 180 NAC 3-008.04, item 3.b. must be maintained until the sealed source is transferred or disposed of. Records of tests of the on/off mechanism and indicator required by 180 NAC 3-008.04, item 3.b. must be maintained for 1 year after the next required test of the "on-off" mechanism and indicator is performed or until the sealed source is transferred or disposed of. Records which are required by 180 NAC 3-008.04, item 3.c. must be maintained for a period of two (2) years from the date of the recorded event or until the device is transferred or disposed of;

e. Immediately suspend operation of the device if there is a failure of, or damage to, or any indication of a possible failure of or damage to, the shielding of the radioactive material or the on-off mechanism or indicator, or upon the detection of 185 becquerel (0.005 microcurie) or more removable radioactive material. The device may not be operated until it has been repaired by the manufacturer or other person holding a specific license to repair such devices that was issued by this Agency, the U.S. Nuclear Regulatory Commission or by an Agreement State. The device and any radioactive material from the device may only be disposed of by transfer to a person authorized by a specific license to receive the radioactive material in the device or as otherwise approved by the Agency, the U.S. Nuclear Regulatory Commission or an Agreement State. A report containing a brief description of the event and the remedial action taken; and, in the case of detection of 185 becqueral (0.005 microcurie) or more removable radioactive material or failure of or damage to a source likely to result in contamination of the premises or the environs, a plan for ensuring that the premises and environs are acceptable for unrestricted use, must be furnished to the Agency within 30 days. Under these circumstances, the criteria set out in 180 NAC 4-016,

"Radiological Criteria for Unrestricted Use," may be applicable, as determined by the Agency on a case-by-case basis;

f. Not abandon the device containing radioactive material;

g. Not export the device containing byproduct material except in accordance with 10 CFR Chapter 1, Part 110.

h. Transfer or Disposal of Device Containing Radioactive Material

(1) Transfer or dispose of the device containing radioactive material only by export as provided by 180 NAC 3-008.04 item 3.g., by transfer to another general licensee as authorized in paragraph 180 NAC 3-008.04, item 3. i., or to a person authorized to receive the device by a specific license issued under 180 NAC 3, or 180 NAC 12 that authorized waste collection, or equivalent regulations of the U.S. Nuclear Regulatory Commission or an Agreement State, or as otherwise approved under 180 NAC 3-008.04, item 3. h. (3).

(2) Furnish a report to the Agency within 30 days after the transfer of a device to a specific licensee or export. The report must contain:

(a) The identification of the device by manufacturer's (or initial transferor's) name, model number, and serial number;
(b) The name, address, and license number of the person receiving the device (license number not applicable if exported); and
(c) The date of the transfer.

(3) Obtain written Agency approval before transferring the device to any other specific licensee not specifically identified in paragraph 180 NAC 3-008.04 item 3.h.(1).

i. Transfer the device to another general licensee only if:

(1) The device remains in use at a particular location. In such case the transferor must give the transferee a copy of 180 NAC 3-008.01, 3-030, 4-057, and 4-058, and any safety documents identified in the label of the device. Within 30 days of the transfer, the transferor must report to the Agency:

(a) The manufacturer's (or initial transferor's) name;
(b) The model number and the serial number of the device transferred;
(c) The transferee's name and mailing address for the location of use; and
(d) The name, title, and phone number of the responsible individual identified by the transferee in accordance with 180 NAC 3-008.04, item 3., l. to have knowledge of and authority to take actions to ensure compliance with the appropriate regulations and requirements; or

(2) The device is held in storage by an intermediate person in the original shipping container at its intended location of use prior to initial use by a general licensee.

j. Comply with the provisions of 180 NAC 4-057 and 4-058 for reporting radiation incidents, theft, or loss of licensed material, but shall be exempt from the other requirements of 180 NAC 4 and 10.

k. Respond to written requests from the Agency to provide information relating to the general license within 30 calendar days of the date of the request, or other time specified in the request. If the general licensee cannot provide the requested information within the allotted time, it must, within the same time period, request a longer period to supply information by submitting a letter to the Radioactive Material Program Manager, Nebraska Health and Human Services Regulation and Licensure, 301 Centennial Mall South, P.O. Box 95007, Lincoln, Nebraska 68509 and provide written justification as to why it cannot comply.

l. Appoint an individual responsible for having knowledge of the appropriate regulations and requirements and the authority for taking required actions to comply with appropriate regulations and requirements. The general licensee, through this individual, must ensure the day-to-day compliance with appropriate regulations and requirements. This appointment does not relieve the general licensee of any of its responsibility in this regard.

m. Register general license devices.

(1) Register, in accordance with 180 NAC 3-008.04, item 3., m., (2) and (3), devices containing at least 370 MBq (10 mCi) of cesium-137, 3.7 MBq (0.1 mCi) of strontium-90, 37 MBq (1 mCi) of cobalt-60, or 37 MBq (1 mCi) of americium-241 or any other transuranic (i.e., element with atomic number greater than uranium (92)), based on the activity indicated on the label. Each address for a location of use, as described in 180 NAC 3-008.04, item 3., m., (3), d., represents a separate general licensee and requires a separate registration and fee.

(2) If in possession of a device meeting the criteria of paragraph 180 NAC 3-008.04, item 3., m., (1), must register these devices annually with the Agency and must pay the fee required by 180 NAC 18. Registration must be done by verifying, correcting, and/or adding to the information provided in a request for registration received from the Agency. The registration information must be submitted to the Agency within 30 days of the date of the request for registration or as otherwise indicated in the request. In addition, a general licensee holding devices that meet the criteria of 180 NAC 3-008.04, item 3 m. (1) is subject to the bankruptcy notification requirement in 180 NAC 3-017.05.

(3) In registering devices, the general licensee must furnish the following information and any other information specifically requested by the Agency:

(a) Name and mailing address of the general licensee.

(b) Information about each device: the manufacturer (or initial transferor), model number, serial number, the radioisotope and activity (as indicated on the label).

(c) Name, title, and telephone number of the responsible person designated as a representative of the general licensee in 180 NAC 3-008.04, item 3. l.

(d) Address or location at which the device(s) are used and/or stored. For portable devices, the address of the primary place of storage.

(e) Certification by the responsible representative of the general licensee that the information concerning the device(s) has been verified through a physical inventory and checking of label information.

(f) Certification by the responsible representative of the general licensee that they are aware of the requirements of the general license.

(4) Persons generally licensed by an Agreement State or the NRC, with respect to devices meeting the criteria in paragraph 180 NAC 3-008.04, item 3., m. (1) are not subject to registration requirements if the devices are used in areas subject to Agency jurisdiction for a period less than 180 days in any calendar year. The Agency will not request registration information from such licensees.

n. Report changes to the mailing address for the location of use (including change in name of general licensee) to the Radioactive Materials Program Director , Nebraska Health and Human Services Regulation and Licensure, 301 Centennial Mall South, P.O. Box 95007, Lincoln, NE 68509 within 30 days of the effective date of the change. For a portable device, a report of address change is only required for a change in the device's primary place of storage.

o. Not hold unused devices for longer than 2 years. If devices with shutters are not being used, the shutter must be locked in the closed position. The testing required by 180 NAC 3-008.04, item 3. b. need not be performed during the period of storage only. However, when devices are put back into service or transferred to another person, and have not been tested within the required test interval, they must be tested for leakage before use or transfer and the shutter tested before use. Devices kept in standby for future use are excluded from the two-year time limit if the general licensee performs quarterly physical inventories of these devices while they are in standby.

4. The general license in 180 NAC 3-008.04, item 1. does not authorize the manufacture or import of devices containing radioactive material.

5. The general license provided in 180 NAC 3-008.04, item 1. is subject to the provisions of 180 NAC 1-004 through 1-009, 180 NAC 3-017, 3-025, 3-027, and 180 NAC 13 .

3-008.05 Luminous Safety Devices for Aircraft

1. A general license is hereby issued to own, receive, acquire, possess, and use tritium or promethium-147 contained in luminous safety devices for use in aircraft, provided:

   a. Each device contains not more than 370 GBq (l0 curies) of tritium or 11.1 GBq (300 millicuries) of promethium-147; and
   b. Each device has been manufactured, assembled or imported in accordance with a specific license issued by the U.S. Nuclear Regulatory Commission, or each device has been manufactured or assembled in accordance with the specifications contained in a specific license issued by the Agency or any Agreement State to the manufacturer or assembler of such device pursuant to licensing requirements equivalent to those in 10 CFR Chapter I, Part 30, § 30.33. and Part 32, § 32.53.

2. Persons who own, receive, acquire, possess, or use luminous safety devices pursuant to the general license in 180 NAC 3-008.05, item 1. are exempt from the requirements of 180 NAC 4 and 180 NAC 10 except that they must comply with the provisions of 180 NAC 4-057 and180 NAC 4-058.

3. This general license does not authorize the manufacture, assembly, or repair of luminous safety devices containing tritium or promethium-147.

4. This general license does not authorize ownership, receipt, acquisition, possession or use of promethium-147 contained in instrument dials.

5. This general license is subject to the provisions of 180 NAC 1-004 through 1-009, 180 NAC 3-017, 3-025, 3-027, and 13.

3-008.06 Ownership of Radioactive Material: A general license is hereby issued to own radioactive material without regard to quantity. Notwithstanding any other provisions of 180 NAC 3, this general license does not authorize the manufacture, production, transfer, receipt, possession or use of radioactive material.

3-008.07 Calibration and Reference Sources

1. A general license is hereby issued to those persons listed below to own, receive, acquire, possess, use, and transfer, in accordance with the provisions of 180 NAC 3-008.07, items 4. and 5., americium-241 in the form of calibration or reference sources:

   a. Any person who holds a specific license issued by the Agency which authorizes him to receive, possess, use, and transfer radioactive material; and
   b. Any person who holds a specific license issued by the U.S. Nuclear Regulatory Commission which authorizes him to receive, possess, use, and transfer special nuclear material.

2. A general license is hereby issued to own, receive, possess, use, and transfer plutonium in the form of calibration or reference sources in accordance with the provisions of 180 NAC 3-008.07, items 4. and 5. to any person who holds a specific

license issued by the Agency which authorizes him to receive, possess, use, and transfer radioactive material.

3. A general license is hereby issued to own, receive, possess, use, and transfer radium-226 in the form of calibration or reference sources in accordance with the provisions of 180 NAC 3-008.07, items 4 and 5 to any person who holds a specific license issued by the Agency which authorizes him to receive, possess, use, and transfer radioactive material.

4. The general licenses in 180 NAC 3-008.07, items 1. through 3. apply only to calibration or reference sources which have been manufactured in accordance with the specifications contained in a specific license issued to the manufacturer or importer of the sources by the U.S. Nuclear Regulatory Commission pursuant to 10 CFR Chapter I, Part 30, § 30.33, in accordance with the specifications contained in a specific license issued to the manufacturer by the Agency, or any Agreement State pursuant to licensing requirements equivalent to those contained in 10 CFR Chapter I, Part 30, § 30.33.

5. The general licenses provided in 180 NAC 3-008.07, items 1.through 3. are subject to the provisions of 180 NAC 1-004 through 1-009, 180 NAC 3-017, 3-025, 3-027, 180 NAC 4, 10, and 13. In addition, persons who own, receive, acquire, possess, use or transfer one or more calibration or reference sources pursuant to these general licenses must:

   a. Not possess at any one time, at any one location of storage or use, more than 185 kBq (5 microcuries) of americium-241, 185 kBq (5 microcuries) of plutonium, and 185 kBq (5 microcuries) of radium-226 in such sources;

   b. Not receive, possess, use, or transfer such source unless the source, or the storage container, bears a label which includes the following statement or a substantially similar statement which contains the information called for in the following statement.

      (1) The receipt, possession, use and transfer of this source Model _____, Serial No. _____, are subject to a general license and the regulations of the U.S. Nuclear Regulatory Commission or of a State with which the Commission has entered into an agreement for the exercise of regulatory authority. Do not remove this label.

      CAUTION - RADIOACTIVE MATERIAL - THIS SOURCE CONTAINS (RADIUM-226) (AMERICIUM-241). (PLUTONIUM)[8] DO NOT TOUCH RADIOACTIVE PORTION OF THIS SOURCE.

      _____
      Name of manufacturer or importer

[8]Showing only the name of the appropriate material.

c. Not transfer, abandon, or dispose of such source except by transfer to a person authorized by a license from the Agency, the U.S. Nuclear Regulatory Commission, or any other Agreement State to receive the source;

d. Store such source, except when the source is being used, in a closed container adequately designed and constructed to contain americium-241, plutonium, or radium-226 which might otherwise escape during storage; and

e. Not use such source for any purpose other than the calibration of radiation detectors or the standardization of other sources.

6. These general licenses do not authorize the manufacture of calibration or reference sources containing americium-241, plutonium, or radium-226.

3-008.08 Reserved

3-008.09 General License for Use of Radioactive Material for Certain In Vitro Clinical or Laboratory Testing

1. A general license is hereby issued to any physician, veterinarian in the practice of veterinary medicine, clinical laboratory or hospital to receive, acquire, possess, transfer or use, for any of the following stated tests, in accordance with the provisions of 180 NAC 3-008.09, items 2. through 6., the following radioactive materials in prepackaged units for use in in vitro clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation therefrom, to human beings or animals:

   a. Iodine-125, iodine-131, selenium-75, cobalt-57, and carbon-14 in units not exceeding 370 kBq (10 microcuries) each.
   b. Hydrogen-3 (tritium), in units not exceeding 1.85 MBq (50 microcuries) each.
   c. Iron-59, in units not exceeding 740 kBq (20 microcuries) each.
   d. Mock Iodine-125 reference or calibration sources, in units not exceeding 1.85 kBq (0.05 microcurie) of iodine-129 and 1.85 Bq (0.005 microcurie) of americium-241 each.

2. No person receives, acquires, possesses, uses or transfers radioactive material pursuant to the general license established by 180 NAC 3-008.09, item 1. until he/she has filed Agency Form NRH-17, "Certificate - In Vitro Testing with Radioactive Material Under General License", with the Agency and received from the Agency a validated copy of Agency Form NRH-17 with certification number assigned. The physician, veterinarian, clinical laboratory or hospital must furnish on Agency Form NRH-17 the following information and such other information as may be required by that form:

   a. Name and address of the physician, veterinarian, clinical laboratory or hospital;
   b. The location of use; and
   c. A statement that the physician, veterinarian in the practice of veterinary medicine, clinical laboratory or hospital has appropriate radiation measuring instruments to carry out in vitro clinical or laboratory tests with radioactive

material as authorized under the general license in 180 NAC 3-008.09, item 1. and that such tests will be performed only by personnel competent in the use of such instruments and in the handling of the radioactive material.

3. A person who receives, acquires, possesses or uses radioactive material pursuant to the general license established by 180 NAC 3-008.09, item 1. must comply with the following:

   a. The general licensee must not possess at any one time, pursuant to the general license in 180 NAC 3-008.09, item 1. at any one location of storage or use a total amount of iodine-125, iodine-131, iron-59, cobalt-57 and/or selenium-75 in excess of 7.4 MBq (200 microcuries).

   b. The general licensee must store the radioactive material, until used, in the original shipping container or in a container providing equivalent radiation protection.

   c. The general licensee must use the radioactive material only for the uses authorized by 180 NAC 3-008.09, item 1.

   d. The general licensee must not transfer the radioactive material to a person who is not authorized to receive it pursuant to a license issued by the Agency, the U.S. Nuclear Regulatory Commission, or any Agreement State, nor transfer the radioactive material in any manner other than in the unopened, labeled shipping container as received from the supplier.

   e. The general licensee must dispose of the Mock Iodine-125 reference or calibration sources described in 180 NAC 3-008.09, item 1.d. as required by 180 NAC 4-039 and 4-044.

4. The general licensee must not receive, acquire, possess, or use radioactive material pursuant to 180 NAC 3-008.09, item 1.:

   a. Except as prepackaged units which are labeled in accordance with the provisions of an applicable specific license issued pursuant to 180 NAC 3-014.08 or in accordance with the provisions of a specific license issued by the U.S. Nuclear Regulatory Commission, or any Agreement State which authorizes the manufacture and distribution of iodine-125, iodine-131, carbon-14, hydrogen-3 (tritium), iron-59, selenium-75, cobalt-57, or Mock Iodine-125 to persons generally licensed under 180 NAC 3-008.09 or its' equivalent, and

   b. Unless the following statement, or substantially similar statement which contains the information called for in the following statement, appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure which accompanies the package:

      This radioactive material is received, acquired, possessed, and used only by physicians, veterinarians in the practice of veterinary medicine, clinical laboratories or hospitals and only for in vitro clinical or laboratory tests not involving internal or external administration of the material, or the radiation

therefrom, to human beings or animals. Its receipt, acquisition, possession, use, and transfer are subject to the regulations and a general license of the U.S. Nuclear Regulatory Commission or of a State with which the Commission has entered into an agreement for the exercise of regulatory authority.

_____
Name of Manufacturer

5. The physician, veterinarian in the practice of veterinary medicine, clinical laboratory or hospital possessing or using radioactive material under the general license of 180 NAC 3-008.09, item 1. must report in writing to the Agency, any changes in the information furnished by him in the "Certificate - In Vitro Testing with Radioactive Material Under General License", Agency Form NRH-17. The report must be furnished within 30 days after the effective date of such change.

6. Any person using radioactive material pursuant to the general license of 180 NAC 3-008.09, item 1 is exempt from the requirements of 180 NAC 4 and 180 NAC 10 with respect to radioactive material covered by that general license, except that such persons using the Mock Iodine-125 described in 180 NAC 3-008.09 item 1.d. must comply with the provisions of 180 NAC 4-039, 4-057, and 4-058.

3-008.10 Ice Detection Devices

1. A general license is hereby issued to own, receive, acquire, possess, use, and transfer strontium-90 contained in ice detection devices, provided each device contains not more than 1.85 MBq (50 microcuries) of strontium-90 and each device has been manufactured or imported in accordance with a specific license issued by the U.S. Nuclear Regulatory Commission or each device has been manufactured in accordance with the specifications contained in a specific license issued by the Agency or any Agreement State to the manufacturer of such device pursuant to licensing requirements equivalent to those in 10 CFR Chapter I, Part 30, § 30.33.

2. Persons who own, receive, acquire, possess, use, or transfer strontium-90 contained in ice detection devices pursuant to the general license in 180 NAC 3-008.10, item 1,

   a. Must upon occurrence of visually observable damage, such as a bend or crack or discoloration from overheating to the device, discontinue use of the device until it has been inspected, tested for leakage, and repaired by a person holding a specific license from the U.S. Nuclear Regulatory Commission or an Agreement State to manufacture or service such devices; or must dispose of the device pursuant to the provisions of 180 NAC 937;
   b. Must assure that all labels affixed to the device at the time of receipt, and which bear a statement which prohibits removal of the labels, are maintained thereon; and
   c. Are exempt from the requirements of 180 NAC 4 and 10 except that such persons must comply with the provisions of 180 NAC 4-039, 4-057, and 4-058.

3. This general license does not authorize the manufacture, assembly, disassembly or repair of strontium-90 in ice detection devices.

4. This general license is subject to the provisions of 180 NAC 1-004 through180 NAC 1-009, 180 NAC 3-017, 180 NAC 3-025, 180 NAC 3-027, and 180 NAC 13.

3-009 RESERVED

SPECIFIC LICENSES

3-010 FILING APPLICATION FOR SPECIFIC LICENSES

3-010.01 Applications for specific licenses must be filed on form NRH-5A (medical) for all medical licenses, form NRH-5B (teletherapy) for all teletherapy licenses, and form NRH-5 for all other licenses.

3-010.02 The Agency may at any time after the filing of the original application, and before the expiration of the license, require further statements in order to enable the Agency to determine whether the application should be granted or denied or whether a license should be modified or revoked.

3-010.03 Each application must be signed by the applicant or licensee or a person duly authorized to act for and on his behalf.

3-010.04 An application for a license may include a request for a license authorizing one or more activities.

3-010.05 In the application, the applicant may incorporate by reference information contained in previous applications, statements, or reports filed with the Agency provided such references are clear and specific.

3-010.06 Applications and documents submitted to the Agency may be made available for public inspection except that the Agency may withhold any document or part thereof from public inspection if disclosure of its content is not required in the public interest and would adversely affect the interest of a person concerned.

3-010.07 As provided by 180 NAC 3-018 certain applications for specific licenses filed under 180 NAC 3 and 5, and 7, must contain a proposed decommissioning funding plan or a certification of financial assurance for decommissioning.

3-010.08 An application for a specific license to use radioactive material in the form of a sealed source or in a device that contains the sealed source must either:

1. Identify the source or device by manufacturer and model number as registered with the U.S. Nuclear Regulatory Commission under 10 CFR Chapter 1, Part 32, § 32.210 or with an Agreement State; or
2. Contain the information identified in 10 CFR Chapter 1, Part 32, § 210(c).

3-010.09 Emergency Plans

1. Each application to possess radioactive materials in unsealed form, on foils or plated sources, or sealed in glass in excess of the quantities in 180 NAC 3, Appendix 3-E "Quantities of Radioactive Materials Requiring Consideration of the Need for an Emergency Plan for Responding to a Release" must contain either:

   a. An evaluation showing that the maximum dose to a person offsite due to a release of radioactive materials would not exceed 0.01 Sv (1 rem) effective dose equivalent or 0.05 Sv (5 rem) to the thyroid; or
   b. An emergency plan for responding to a release of radioactive material.

2. One or more of the following factors may be used to support an evaluation submitted under 180 NAC 3-010.09, item 1:

   a. The radioactive material is physically separated so that only a portion could be involved in an accident;
   b. All or part of the radioactive material is not subject to release during an accident because of the way it is stored or packaged;
   c. The release fraction in the respirable size range would be lower than the release fraction shown in 180 NAC 3, Appendix 3-E due to the chemical or physical form of the material;
   d. The solubility of the radioactive material would reduce the dose received;
   e. Facility design or engineered safety features in the facility would cause the release fraction to be lower than shown in 180 NAC 3, Appendix 3-E;
   f. Operating restrictions or procedures would prevent a release fraction as large as that shown in 180 NAC 3, or
   g. Other factors appropriate for the specific facility.

3. An emergency plan for responding to a release of radioactive material submitted under 180 NAC 3-010.09 must include the following information:

   a. Facility description: A brief description of the licensee's facility and area near the site.
   b. Types of accidents: An identification of each type of radioactive materials accident for which protective actions may be needed.
   c. Classification of accidents: A classification system for classifying accidents as alerts or site area emergencies.
   d. Detection of accidents: Identification of the means of detecting each type of accident in a timely manner.
   e. Mitigation of consequences: A brief description of the means and equipment for mitigating the consequences of each type of accident, including those provided to protect workers onsite, and a description of the program for maintaining the equipment.
   f. Assessment of releases: A brief description of the methods and equipment to assess releases of radioactive materials.
   g. Responsibilities: A brief description of the responsibilities of licensee personnel should an accident occur, including identification of personnel responsible for promptly notifying offsite response organizations and the Agency; also responsibilities for developing, maintaining, and updating the plan.
   h. Notification and coordination: A commitment to and a brief description of the means to promptly notify offsite response organizations and request offsite

assistance, including medical assistance for the treatment of contaminated injured onsite workers when appropriate. A control point must to be established. The notification and coordination must be planned so that unavailability of some personnel, parts of the facility, and some equipment will not prevent the notification and coordination. The licensee must also commit to notify the Agency immediately after notification of the appropriate offsite response organizations and not later than one hour after the licensee declares an emergency.[9]

i. Information to be communicated: A brief description of the types of information on facility status, radioactive releases, and recommended protective actions, if necessary, to be given to offsite response organizations and to the Agency.

j. Training: A brief description of the frequency, performance objectives and plans for the training that the licensee will provide workers on how to respond to an emergency including any special instructions and orientation tours the licensee would offer to fire, police, medical and other emergency personnel. The training must familiarize personnel with site-specific emergency procedures. Also, the training must thoroughly prepare site personnel for their responsibilities in the event of accident scenarios postulated as most probable for the specific site, including the use of team training for such scenarios.

k. Safe shutdown: A brief description of the means of restoring the facility to a safe condition after an accident.

l. Exercises: Provisions for conducting quarterly communications checks with offsite response organizations and biennial onsite exercises to test response to simulated emergencies. Quarterly communications checks with offsite response organizations must include the check and update of all necessary telephone numbers. The licensee must invite offsite response organizations to participate in the biennial exercises. Participation of offsite response organizations in biennial exercises although recommended is not required. Exercises must use accident scenarios postulated as most probable for the specific site and the scenarios must not be known to most exercise participants. The licensee must critique each exercise using individuals not having direct implementation responsibility for the plan. Critiques of exercises must evaluate the appropriateness of the plan, emergency procedures, facilities, equipment, training of personnel, and overall effectiveness of the response. Deficiencies found by the critiques must be corrected.

m. Hazardous chemicals: A certification that the applicant has met its responsibilities under the Emergency Planning and Community Right-to-Know Act of 1986, Title III, P. L. 99-499, if applicable to the applicant's activities at the proposed place of use of the radioactive material.

4. The licensee must allow the offsite response organizations, expected to respond in case of an accident, 60 days to comment on the licensee's emergency plan before submitting it to the Agency. The licensee must provide any comments received within the 60 days to the Agency with the emergency plan.

[9]These reporting requirements do not supersede or release licensees of complying with the requirements under the Emergency Planning and Community Right-to-Know Act of 1986, Title III, P. L. 99-499 or other state or federal reporting requirements.

3-011 GENERAL REQUIREMENTS FOR THE ISSUANCE OF SPECIFIC LICENSES: A license application will be approved if the Agency determines that:

1. The applicant is qualified by reason of training and experience to use the material in question for the purpose requested in accordance with Title 180 in such a manner as to minimize danger to public health and safety or property;

2. The applicant's proposed equipment, facilities, and procedures are adequate to minimize danger to the public health and safety or property;

3. The issuance of the license will not be inimical to the health and safety of the public; and

4. The applicant satisfies any applicable special requirements in 180 NAC 3-013, 180 NAC 3-014, or 180 NAC 3-015, 180 NAC 5, 180 NAC 7, 180 NAC 12, 180 NAC 14 or 180 NAC 19.

3-011.01 Environmental Report, Commencement of Construction: In the case of an application for a license to receive and possess radioactive material for commercial waste management, source material milling, or for the conduct of any other activity which the Agency determines will significantly affect the quality of the environment, the Agency, before commencement of construction of the plant or facility in which the activity will be conducted, has concluded, after weighing the environmental, economic, technical and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. Commencement of construction prior to such conclusion is grounds for denial of a license to receive and possess radioactive material in such plant or facility. As used in this paragraph the term "commencement of construction" means any clearing of land, excavation or other substantial action that would adversely affect the environment of a site. The term does not mean site exploration, necessary roads for site exploration, borings to determine foundation conditions, or other preconstruction monitoring or testing to establish background information related to the suitability of the site or the protection of the environmental values.

3-011.02 Financial Surety Arrangements for Site Reclamation

1. Pursuant to Radiation Control Act 71-3508.04, Reissued Revised Statues of Nebraska 1943, as amended and as otherwise provided, financial surety arrangements for site reclamation which may consist of surety bonds, cash deposits, certificates of deposit, deposits of government securities, letters or lines of credit, or any combination of the above for the categories of licensees listed in 180 NAC 3-011.02 must be established to ensure the protection of the public health and safety in the event of abandonment, default, or other inability of the licensee to meet the requirements of the Act.

    a. The amount of funds to be ensured by such surety arrangements must be based on Agency approved cost estimates equal to meet the requirements of 180 NAC 3-011.02, item 1.
    b. Self insurance, or any arrangement which essentially constitutes self insurance, will not satisfy the surety requirement since this provides no additional assurance other than that which already exists through license requirements.

2. The arrangements required in 180 NAC 3-011.02, item 1. must be established prior to issuance of the license to assure that sufficient funds will be available to carry out the decontamination and decommissioning of the facility, except as provided in 3-011.02, item 3.

3. If application is made to amend an existing license to fall within the purview of 180 NAC 3-011.06 then the financial surety arrangements for site reclamation must be established prior to the issuance of the amendment.

4. The following specific licensees are required to make financial surety arrangements:

   a. Major processors;
   b. Waste management licensees, except the commercial disposal of low-level radioactive waste in a disposal facility, designated by the Central Interstate Low-Level Radioactive Waste Compact Commission;
   c. Former U.S. Atomic Energy Commission or U.S. Nuclear Regulatory Commission licensed facilities;
   d. Source material milling operations; and
   e. All others except persons exempt pursuant to 180 NAC 3-011.02, item 5.

5. The following persons are exempt from the requirements of 180 NAC 3-011.02, item 1. because they are exempt from licensure:

   a. All State, local, or other government agencies unless they are subject to 180 NAC 3-011.02, item 4.b. or 4.d.,
   b. Persons authorized to possess no more than 1,000 times the quantity specified in 180 NAC 3, Appendix 3-B or combination of radioactive material listed therein as given in 180 NAC 3, Appendix 3-B, Note 1.;
   c. Persons authorized to possess hydrogen-3 contained as hydrogen gas in a sealed source; or
   d. Persons authorized to possess radioactive noble gases in sealed sources with no radioactive daughter product with half-life greater than 30 days.

6. Long-term Care Requirements: Pursuant to Radiation Control Act 71-3508.04, Reissued Revised Statues of Nebraska, 1943, as amended and as otherwise provided, a long-term care fund must be established by the following specific licensees prior to the issuance of the license or prior to the termination of the license if the applicant chooses at the time of the licensure to provide a surety in lieu of a long-term care fund:

   a. Waste management licensees.
   b. Source material milling and mill tailings licensees.

3-012 RESERVED

3-013 SPECIAL REQUIREMENTS FOR SPECIFIC LICENSES OF BROAD SCOPE: 180 NAC 3-013 prescribes requirements for the issuance of specific licenses of broad scope for radioactive material ("broad licenses") and certain regulations governing holders of such licenses:

3-013.01 The different types of broad licenses are set forth below:

1. A "Type A specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use and transfer of any chemical or physical form of the radioactive material specified in the license, but not exceeding quantities specified in the license, for any authorized purpose. The quantities specified are usually in the multicurie range, and the limits are based on types of radioactive materials, proposed use and upon the training and experience of the user(s).

2. A "Type B specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use and transfer of any chemical or physical form of radioactive material specified in 180 NAC 3, Appendix 3-C for any authorized purpose. The possession limit for a Type B broad license, if only one radionuclide is possessed thereunder, is the quantity specified for that radionuclide in Column I of 180 NAC 3, Appendix 3-C, Column I. If two or more radionuclides are possessed thereunder, the possession limit for each is determined as follows: For each radionuclide, determine the ratio of the quantity possessed to the applicable quantity specified in 180 NAC 3, Appendix 3-C, Column l, for that radionuclide. The sum of the ratios for all radionuclides possessed under the license must not exceed unity.

3. A "Type C specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use and transfer of any chemical or physical form of radioactive material specified in 180 NAC 3, Appendix 3-C for any authorized purpose. The possession limit for a Type C broad license, if only one radionuclide is possessed thereunder, is the quantity specified for that radionuclide in 180 NAC 3, Appendix 3-C, Column II. If two or more radionuclides are possessed thereunder, the possession limit is determined for each as follows: For each radionuclide determine the ratio of the quantity possessed to the applicable quantity specified in 180 NAC 3, Appendix 3-C, Column II for that radionuclide. The sum of the ratios for all radionuclides possessed under the license must not exceed unity.

3-013.02 An application for a Type A specific license of broad scope will be approved if:

1. The applicant satisfies the general requirements specified in 180 NAC 3-011;
2. The applicant has engaged in a reasonable number of activities involving the use of radioactive material; and
3. The applicant has established administrative controls and provisions relating to organization and management, procedures, record keeping, material control and accounting, and management review that are necessary to assure safe operations, including:

    a. The establishment of a radiation safety committee composed of such persons as a radiation safety officer, a representative of management, and persons trained and experienced in the safe use of radioactive material;
    b. The appointment of a radiation safety officer who is qualified in training and experience in radiation protection consistent with the requirements of training specified in 180 NAC 15-015.01, item 1, and who is available for advice and assistance on radiation safety matters; and
    c. Authorized users designated by the Radiation Safety Committee must have formal training and experience in the safe handling of radioactive material consistent with the requirements of training specified in 180 NAC 15-015.01, item 2.; and

d. The establishment of appropriate administrative procedures to assure:

(1) Control of procurement and use of radioactive material;
(2) Completion of safety evaluations of proposed uses of radioactive material which takes into consideration such matters as the adequacy of facilities and equipment, training and experience of the user, and the operating or handling procedures; and
(3) Review, approval, and recording by the radiation safety committee of safety evaluations of proposed uses prepared in accordance with 180 NAC 3-013.02, item 3.d.(2). prior to use of the radioactive material.

3-013.03 An application for a Type B specific license of broad scope will be approved if:

1. The applicant satisfies the general requirements specified in180 NAC 3-011; and
2. The applicant has established administrative controls and provisions relating to organization and management, procedures, record keeping, material control and accounting, and management review that are necessary to assure safe operations, including:

a. The appointment of a radiation safety officer who is qualified by training and experience in radiation protection consistent with the requirements of training specified in 180 NAC 15-015.01, item 1 and who is available for advice and assistance on radiation safety matters,
b. Authorized users must have formal training and experience in the safe handling of radioactive material consistent with the requirements of training specified in 180 NAC 15-015.01, item 2; and
c. The establishment of appropriate administrative procedures to assure:

(1) Control of procurement and use of radioactive material,
(2) Completion of safety evaluations of proposed uses of radioactive material which take into consideration such matters as the adequacy of facilities and equipment, training and experience of the user, and the operating or handling procedures, and
(3) Review, approval, and recording by the radiation safety officer of safety evaluations of proposed uses prepared in accordance with 180 NAC 3-013.03, item 2.c. prior to use of the radioactive material.

3-013.04 An application for a Type C specific license of broad scope will be approved if:

1. The applicant satisfies the general requirements specified in 180 NAC 3-011;
2. The applicant submits a statement that radioactive material will be used only by, or under the direct supervision of, individuals who have received:

a. A college degree at the bachelor level, or equivalent training and experience, in the physical or biological sciences or in engineering, and
b. At least 40 hours of formal training and 160 hours experience in the safe handling of radioactive material, and in the characteristics of ionizing radiation, units of radiation dose and quantities, radiation detection instrumentation, and biological hazards of exposure to radiation appropriate to the type and forms of radioactive material to be used; and

3. The applicant has established administrative controls and provisions relating to procurement of radioactive material, procedures, record keeping, material control and accounting, and management review necessary to assure safe operations.

3-013.05 Specific licenses of broad scope are subject to, based on quantities and types of radioactive materials, proposed use and upon the training and experience of the user(s), to the following conditions:

1. Unless specifically authorized, persons licensed pursuant to 180 NAC 3-013 must not:

   a. Conduct tracer studies in the environment involving direct release of radioactive material;
   b. Receive, acquire, own, possess, use or transfer devices containing 3.7 PBq (100,000 curies) or more of radioactive material in sealed sources used for irradiation of materials;
   c. Conduct activities for which a specific license issued by the Agency under 180 NAC 3-014, 3-015 or 180 NAC 7, and 12 is required; or
   d. Add or cause the addition of radioactive material to any food, beverage, cosmetic, drug, or other product designed for ingestion or inhalation by, or application to, a human being.

2. Each Type A specific license of broad scope issued under this 180 NAC 3-013.05 is subject to the condition that radioactive material possessed under the license may only be used by, or under the direct supervision of, individuals approved by the licensee's radiation safety committee.

3. Each Type B specific license of broad scope issued under 180 NAC 3-013.05 is subject to the condition that radioactive material possessed under the license may only be used by, or under the direct supervision of, individuals approved by the licensee's radiation safety officer.

4. Each Type C specific license of broad scope issued under this 180 NAC 3-013.05, item 4 is subject to the condition that radioactive material possessed under the license may only be used by, or under the direct supervision of, individuals who satisfy the requirements of 180 NAC 3-013.04.

3-014 SPECIAL REQUIREMENTS FOR A SPECIFIC LICENSE TO MANUFACTURE, ASSEMBLE, REPAIR, OR DISTRIBUTE COMMODITIES, PRODUCTS, OR DEVICES WHICH CONTAIN RADIOACTIVE MATERIAL

3-014.01 Licensing the Introduction of Radioactive Material Into Products In Exempt Concentrations

1. In addition to the requirements set forth in 180 NAC 3-011, a specific license authorizing the introduction of radioactive material into a product or material owned by or in the possession of the licensee or another to be transferred to persons exempt under 180 NAC 3-004.01, item 1 will be issued if:

   a. The applicant submits a description of the product or material into which the radioactive material will be introduced, intended use of the radioactive

material and the product or material into which it is introduced, method of introduction, initial concentration of the radioactive material in the product or material, control methods to assure that no more than the specified concentration is introduced into the product or material, estimated time interval between introduction and transfer of the product or material, and estimated concentration of the radioactive material in the product or material at the time of transfer; and

b. The applicant provides reasonable assurance that the concentrations of radioactive material at the time of transfer will not exceed the concentrations in 180 NAC 3, Appendix 3-A, that reconcentration of the radioactive material in concentrations exceeding those in Appendix 3-A of 180 NAC 3 is not likely, that use of lower concentrations is not feasible, and that the product or material is not likely to be incorporated in any food, beverage, cosmetic, drug or other commodity or product designed for ingestion or inhalation by, or application to, a human being.

2. Each person licensed under 180 NAC 3-014.01 mustfile an annual report with the Agency which identifies the type and quantity of each product or material into which radioactive material has been introduced during the reporting period; name and address of the person who owned or possessed the product or material, into which radioactive material has been introduced, at the time of introduction; the type and quantity of radionuclide introduced into each such product or material; and the initial concentrations of the radionuclide in the product or material at time of transfer of the radioactive material by the licensee. If no transfers of radioactive material have been made pursuant to 180 NAC 3-014.01 during the reporting period, the report must so indicate. The report must cover the year ending June 30, and must be filed within 30 days thereafter.

3. The Radiation Safety Officer and/or authorized user must have training and experience requirements consistent with training specified in 180 NAC 15-018.01.

3-014.02 Licensing the Distribution of Radioactive Material in Exempt Quantities

1. An application for a specific license to distribute NARM, to persons exempted from Title 180 pursuant to 180 NAC 3-004.02 will be approved if:

a. The radioactive material is not contained in any food, beverage, cosmetic, drug, or other commodity designed for ingestion or inhalation by, or application to, a human being;
b. The radioactive material is in the form of processed chemical elements, compounds, or mixtures, tissue samples, bioassay samples, counting standards, plated or encapsulated sources, or similar substances, identified as radioactive and to be used for its radioactive properties, but is not incorporated into any manufactured or assembled commodity, product, or device intended for commercial distribution;
c. The applicant submits copies of prototype labels and brochures and the Agency approves such labels and brochures; and
d. Out-of-State manufacturers of the product have a license issued by a State with requirements comparable to those under this rule for manufacturer of similar products.

2. The license issued under 180 NAC 3-014.02, item 1 is subject to the following conditions:

   a. The licensee must not sell or transfer more than 10 exempt quantities in any single transaction. However, an exempt quantity may be composed of fractional parts of one or more of the exempt quantity provided the sum of the fractions must not exceed unity.
   b. Each exempt quantity must be separately and individually packaged. No more than 10 such packaged exempt quantities will be contained in any outer package for transfer to persons exempt pursuant to 180 NAC 3-004.02. The outer package must be such that the dose rate at the external surface of the package does not exceed 5 μSv (0.5 millirem) per hour.
   c. The immediate container of each quantity or separately packaged fractional quantity of radioactive material must bear a durable, legible label which (a) identifies the radionuclide and the quantity of radioactivity, and (b) bears the words "Radioactive Material."
   d. In addition to the labeling information required by 180 NAC 3-014.02, item 2.c., the label affixed to the immediate container, or an accompanying brochure, must (a) state that the contents are exempt from U.S. Nuclear Regulatory Commission or Agreement State requirements; (b) bear the words "Radioactive Material -- Not for Human Use -- Introduction into Foods, Beverages, Cosmetics, Drugs, or Medicinals, or into Products Manufactured for Commercial Distribution is Prohibited -- Exempt Quantities Should Not Be Combined"; and (c) set forth appropriate additional radiation safety precautions and instructions relating to the handling, use, storage, and disposal of the radioactive material.

3. Each person licensed under 180 NAC 3-014.02 must maintain records of transfer of material for a period of two years after such transfer, identifying, by name and address, each person to whom radioactive material is transferred for use under 180 NAC 3-004.02 or the equivalent regulations of the U.S. Nuclear Regulatory Commission or an Agreement State, and stating the kinds and quantities of radioactive material transferred. An annual summary report stating the total quantity of each radionuclide transferred under the specific license must be filed with the Agency. Each report will cover the year ending June 30, and must be filed within 30 days thereafter. If no transfers of radioactive material have been made pursuant to 180 NAC 3-014.02 during the reporting period, the report must so indicate.

4. The Radiation Safety Officer and/or authorized user must have training and experience requirements consistent with training specified in 180 NAC 15-018.01.

3-014.03 Licensing the Incorporation of Naturally Occurring Accelerator-Produced Radioactive Material Into Gas and Aerosol Detectors. An application for a specific license authorizing the incorporation of NARM into gas and aerosol detectors to be distributed to persons exempt under 180 NAC 3-004.03, item 3 will be approved if the application satisfies the requirements of § 32.26 of 10 CFR Part 32 attached hereto as part of . The maximum quantity of radium-226 in each device must not exceed 3.7 kBq (0.1 microcurie).

3-014.04 Licensing the Manufacture and Distribution of Devices to Persons Generally Licensed Under 180 NAC 3-008.04

1. An application for a specific license to manufacture or distribute devices containing radioactive material, excluding special nuclear material, to persons generally licensed under 180 NAC 3-008.04 or equivalent regulations of the U.S. Nuclear Regulatory Commission, or an Agreement State will be approved if:

   a. The applicant satisfies the general requirements of 180 NAC 3-011;
   b. The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control, labels, proposed uses, installation, servicing, leak testing, operating and safety instructions, and potential hazards of the device to provide reasonable assurance that:

      (1) The device can be safely operated by persons not having training in radiological protection;
      (2) Under ordinary conditions of handling, storage, and use of the device, the radioactive material contained in the device will not be released or inadvertently removed from the device, and it is unlikely that any person will receive in one year a dose in excess of 10% of the annual limits specified in 180 NAC 4-005.01; and
      (3) Under accident conditions (such as fire and explosion) associated with handling, storage, and use of the device, it is unlikely that any person would receive an external radiation dose or dose commitment in excess of the following organ doses:

Whole body; head and trunk; active blood-forming organs; gonads; or lens of eye	150 mSv (15 rems)
Hands and forearms; feet and ankles; localized areas of skin averaged over areas no larger than 1 square centimeter	2 Sv (200 rems)
Other organs	500 mSv (50 rems)

   c. Each device bears a durable, legible, clearly visible label or labels approved by the Agency, which contain in a clearly identified and separate statement:

      (1) Instructions and precautions necessary to assure safe installation, operation, and servicing of the device. Documents such as operating and service manuals may be identified in the label and used to provide this information;
      (2) The requirement, or lack of requirement, for leak testing, or for testing any on-off mechanism and indicator, including the maximum time interval for such testing, and the identification of radioactive material by isotope, quantity of radioactivity, and date of determination of the quantity; and
      (3) The information called for in the following statement, as appropriate in the same or substantially similar form:

The receipt, possession, use, and transfer of this device Model _____[10], Serial No. _____[10], are subject to a general license or the equivalent and the regulations of the U.S. Nuclear Regulatory Commission or a state with which the U.S. Nuclear Regulatory Commission has entered into an agreement for the exercise of regulatory authority. This label must be maintained on the device in a legible condition. Removal of this label is prohibited.

CAUTION - RADIOACTIVE MATERIAL

_____

Name of Manufacturer or Distributor[10]

d. Each device having a separable source housing that provides the primary shielding for the source also bears, on the source housing, a durable label containing the device model number and serial number, the isotope and quantity, the words, "`Caution-Radioactive Material,'' the radiation symbol described in 180 NAC 4-033.01, and the name of the manufacturer or initial distributor.

e. Each device meeting the criteria of 180 NAC 3-008.04, item 3. m. (1), bears a permanent (e.g., embossed, etched, stamped, or engraved) label affixed to the source housing if separable, or the device if the source housing is not separable, that includes the words, "Caution-Radioactive Material,'' and, if practicable, the radiation symbol described in 180 NAC 4-033.01.

2. In the event the applicant desires that the device be required to be tested at intervals longer than six months, either for proper operation of the on-off mechanism and indicator, if any, or for leakage of radioactive material or for both, the applicant must include in the application sufficient information to demonstrate that such longer interval is justified by performance characteristics of the device or similar devices and by design features which have a significant bearing on the probability or consequences of leakage of radioactive material from the device or failure of the on-off mechanism and indicator. In determining the acceptable interval for the test for leakage of radioactive material, the Agency will consider information which includes, but is not limited to:

a. Primary containment or source capsule;
b. Protection of primary containment;
c. Method of sealing containment;
d. Containment construction materials;
e. Form of contained radioactive material;
f. Maximum temperature withstood during prototype tests;
g. Maximum pressure withstood during prototype tests;
h. Maximum quantity of contained radioactive material;
i. Radiotoxicity of contained radioactive material; and

[10]The model, serial number, and name of manufacturer or distributor may be omitted from this label provided the information is elsewhere specified and labeling affixed to the device.

j. Operating experience with identical devices or similarly designed and constructed devices.

3. In the event the applicant desires that the general licensee under 180 NAC 3-008.04, or under equivalent regulations of U.S. Nuclear Regulatory Commission, or an Agreement State be authorized to install the device, collect the sample to be analyzed by a specific licensee for leakage of radioactive material, service the device, test the on-off mechanism and indicator, or remove the device from installation, the applicant must include in his application written instructions to be followed by the general licensee, estimated calendar quarter doses associated with such activity or activities, and bases for such estimates. The submitted information must demonstrate that performance of such activity or activities by an individual untrained in radiological protection, in addition to other handling, storage, and use of devices under the general license, is unlikely to cause that individual to receive a dose in excess of 10% of the annual limits specified in 180 NAC 4-005.01.

4. Conditions of transferring a device for use under a general license in 180 NAC 3-008.04

a. If a device containing radioactive material is to be transferred for use under the general license in 180 NAC 3-008.04, each person that is licensed under 180 NAC 3-014.04 must provide the information specified in this paragraph to each person to whom a device is to be transferred. This information must be provided before the device may be transferred. In the case of a transfer through an intermediate person, the information must also be provided to the intended user prior to initial transfer to the intermediate person. The required information includes:

(1). A copy of the general license contained in 180 NAC 3-008.04, item 3. b. through d or item 3. m. do not apply to the particular device, those paragraphs may be omitted.
(2). A copy of 180 NAC 3-008.01, 180 NAC 3-030, 180 NAC 4-057 and 4-058;
(3) A list of the services that can only be performed by a specific licensee;
(4) Information on acceptable disposal options including estimated costs of disposal; and
(5) An indication that the Agency's policy is to issue high civil penalties for improper disposal.

b. If radioactive material is to be transferred in a device for use under an equivalent general license of the U.S. Nuclear Regulatory Commission or an Agreement State, each person that is licensed under 180 NAC 3-014.04 provide the information specified in this paragraph to each person to whom a device is to be transferred. This information must be provided before the device may be transferred. In the case of a transfer through an intermediate person, the information must also be provided to the intended user prior to initial transfer to the intermediate person. The required information includes:

(1) A copy of the 180 NAC 3-008.04, 180 NAC 3-008.01, 180 NAC 4-057

and 058 or a copy of equivalent U.S. Nuclear Regulatory Commission or Agreement State's regulations. If a copy of the U.S. Nuclear Regulatory Commission regulations is provided to a prospective general licensee in lieu of the Agency's or Agreement State's regulations, it must be accompanied by a note explaining that use of the device is regulated by the U. S. Nuclear Regulatory Commission or an Agreement State; if certain paragraphs of the regulations do not apply to the particular device, those paragraphs may be omitted.

(2) A list of the services that can only be performed by a specific licensee;

(3) Information on acceptable disposal options including estimated costs of disposal; and

(4) The name or title, address, and phone number of the contact at the Agency, U.S. Nuclear Regulatory Commission or Agreement State from which additional information may be obtained.

c. An alternative approach to informing customers may be proposed by the licensee for approval by the Agency.

d. Each device that is transferred after (the effective date of these regulations) must meet the labeling requirements in 180 NAC 3-014.04, item 1. c. through d.

e. If a notification of bankruptcy has been made under 180 NAC 3-017.05 or the license is to be terminated, each person licensed under 180 NAC 3-014.04 must provide, upon request, to the Agency the U.S. Nuclear Regulatory Commission and to any appropriate Agreement State, records of final disposition required under 180 NAC 3-014.04, item 5. c.

5. Material transfer reports and records

Each person under 180 NAC 3-014.04 to initially transfer devices to generally licensed persons must comply with the requirements of 180 NAC 3-014.04, item 5.

a. The person must report all transfers of devices to persons for use under the general license in 180 NAC 3-008.04 and all receipts of devices from persons licensed under 180 NAC 3-008.04 to the Radioactive Material Program Manager, Nebraska Health and Human Services Regulation and Licensure, 301 Centennial Mall South, P.O. Box 95007, Lincoln, Nebraska 68509. The report must be submitted on a quarterly basis on the NRH Form 653—"Transfers of Industrial Devices Report" or in a clear and legible report containing all of the data required by the form.

(1) The required information for transfers to general licensees includes:

(a) The identity of each general licensee by name and mailing location of use, an alternate address for the general licensee must be submitted along with information on the actual location of use.

(b) The name, title, and phone number of the person identified by the general licensee as having knowledge of and authority to take required actions to ensure compliance with the appropriate regulations and requirements;

(c) The date of transfer;

(d) The type, model number, and serial number of the device

transferred; and

(e) The quantity and type of radioactive material contained in the device.

(2) If one or more intermediate persons will temporarily possess the device at the intended place of use before its possession by the user, the report must include the same information for both the intended user and each intermediate person, and clearly designate the intermediate person(s).

(3) For devices received from a 180 NAC 3-008.04 general licensee, the report must include the identity of the general licensee by name and address, the type, model number, and serial number of the device received, the date of receipt, and, in the case of devices not initially transferred by the reporting licensee, the name of the manufacturer or initial transferor.

(4) If the licensee makes changes to a device possessed by a 180 NAC 3-008.04 general licensee, such that the label must be changed to update required information, the report must identify the general licensee, the device, and the changes to information on the device label.

(5) The report must cover each calendar quarter, must be filed within 30 days of the end of the calendar quarter, and must clearly indicate the period covered by the report.

(6) The report must clearly identify the specific licensee submitting the report and include the license number of the specific licensee.

(7) If no transfers have been made to or from persons generally licensed under 180 NAC 3-008.04 during the reporting period, the report must so indicate.

b. The person must report all transfers of devices to persons for use under a general license in an U.S. Nuclear Regulatory Commission or Agreement State's regulations that are equivalent to 180 NAC 3-008.04 and all receipts of devices from general licensees in the U.S. Nuclear Regulatory Commission or Agreement State's jurisdiction to the U.S. Nuclear Regulatory Commission or responsible Agreement State agency. The report must be submitted on the Agency's Form 653—"Transfers of Industrial Devices Report" or in a clear and legible report containing all of the data required by the form.

(1) The required information for transfers to general licensees includes:

(a) The identity of each general licensee by name and mailing address for the location of use; if there is no mailing address for the location of use, an alternate address for the general licensee must be submitted along with information on the actual location of use.

(b) The name, title, and phone number of the person identified by the general licensee as having knowledge of and authority to take required actions to ensure compliance with the appropriate regulations and requirements;

(c) The date of transfer;

(d) The type, model number, and serial number of the device

transferred; and

(e) The quantity and type of radioactive material contained in the device.

(2) If one or more intermediate persons will temporarily possess the device at the intended place of use before its possession by the user, the report must include the same information for both the intended user and each intermediate person, and clearly designate the intermediate person(s).

(3) For devices received from a general licensee, the report must include the identity of the general licensee by name and address, the type, model number, and serial number of the device received, the date of receipt, and, in the case of devices not initially transferred by the reporting licensee, the name of the manufacturer or initial transferor.

(4) If the licensee makes changes to a device possessed by a general licensee, such that the label must be changed to update required information, the report must identify the general licensee, the device, and the changes to information on the device label.

(5) The report must cover each calendar quarter, must be filed within 30 days of the end of the calendar quarter, and must clearly indicate the period covered by the report.

(6) The report must clearly identify the specific licensee submitting the report and must include the license number of the specific licensee.

(7) If no transfers have been made to or from the U.S. Nuclear Regulatory Commission or a particular Agreement State during the reporting period, this information must be reported to the U.S. Nuclear Regulatory Commission or responsible Agreement State agency upon request of the Agency.

c. The person must maintain all information concerning transfers and receipts of devices that supports the reports required by this 180 NAC 3-014.04, Item 5. Records required by 180 NAC 3-014.04, item 5 must be maintained for a period of 3 years following the date of the recorded event.

3-014.05 Special Requirements for the Manufacture, Assembly, or Repair of Luminous Safety Devices for Use in Aircraft. An application for a specific license to manufacture, assemble, or repair luminous safety devices containing tritium or promethium-147 for use in aircraft, for distribution to persons generally licensed under 180 NAC 3-008.05 will be approved subject to the following conditions:

1. The applicant satisfies the general requirements specified in 180 NAC 3-011, and

2. The applicant satisfies the requirements of 10 CFR Chapter I, Part 30, § 30.33, and Part 32, § 32.53-32.56 and 32.101.

3. The Radiation Safety Officer and/or authorized user must have training and experience requirements consistent with training specified in 180 NAC 15-018.01.

3-014.06 Special Requirements for License to Manufacture Calibration Sources Containing Americium-241, Plutonium or Radium-226 for Distribution to Persons Generally Licensed Under 180 NAC 3-008.07. An application for a specific license to manufacture calibration and

reference sources containing americium-241, plutonium or radium-226 to persons generally licensed under 180 NAC 3-008.07 will be approved subject to the following conditions:

1. The applicant satisfies the general requirement of 180 NAC 3-011, and

2. The applicant satisfies the requirements of 10 CFR Chapter I, Part 30, §30.33 30.33 and Part 32, 32.57-32.59 and 32.102 and 10 CFR Chapter I, Part 70, §70.39, and

3. The Radiation Safety Officer and/or authorized user must have training and experience requirements consistent with training specified in 180 NAC 15-018.01.

3-014.07 Reserved

3-014.08 Manufacture and Distribution of Radioactive Material for Certain In Vitro Clinical or Laboratory Testing Under General License. An application for a specific license to manufacture or distribute radioactive material for use under the general license of 180 NAC 3-008.09 will be approved if:

1. The applicant satisfies the general requirements specified in 180 NAC 3-011.
2. The radioactive material is to be prepared for distribution in prepackaged units of:

   a. Iodine-125 in units not exceeding 370 kBq (10 microcuries) each.
   b. Iodine-131 in units not exceeding 370 kBq (10 microcuries) each.
   c. Carbon-14 in units not exceeding 370 kBq (10 microcuries) each.
   d. Hydrogen-3 (tritium) in units not exceeding 1.85 MBq (50 microcuries) each.
   e. Iron-59 in units not exceeding 740 kBq (20 microcuries) each.
   f. Cobalt-57 in units not exceeding 370 kBq (10 microcuries) each.
   g. Selenium-75 in units not exceeding 370 kBq (10 microcuries) each.
   h. Mock Iodine-125 in units not exceeding 1.85 kBq (0.05 microcurie) of iodine-129 and 185 Bq (0.005 microcurie) of americium-241 each.

3. Each prepackaged unit bears a durable, clearly visible label:

   a. Identifying the radioactive contents as to chemical form and radionuclide, and indicating that the amount of radioactivity does not exceed 370 kBq (10 microcuries) of iodine-125, iodine-131, carbon-14, cobalt-57, or selenium-75; 1.85 MBq (50 microcuries) of hydrogen-3 (tritium); 740 kBq (20 microcuries) of iron-59; or Mock Iodine-125 in units not exceeding 1.85 kBq (0.05 microcurie) of iodine-129 and 185 Bq (0.005 microcurie) of americium-241 each; and

   b. Displaying the radiation caution symbol described in 180 NAC 4-033.01 and the words, "CAUTION, RADIOACTIVE MATERIAL" and "Not for Internal or External Use in Humans or Animals."

4. The following statement, or a substantially similar statement which contains the information called for in the following statement, appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure which accompanies the package:

This radioactive material may be received, acquired, possessed, and used only by physicians, veterinarians in the practice of veterinary medicine, clinical laboratories or hospitals and only for In Vitro clinical or laboratory tests not involving internal or external administration of the material, or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use, and transfer are subject to the regulations and a general license of the U.S. Nuclear Regulatory Commission or of a State with which the Commission has entered into an agreement for the exercise of regulatory authority.

_____
Name of Manufacturer

5. The label affixed to the unit, or the leaflet or brochure which accompanies the package, contains adequate information as to the precautions to be observed in handling and storing such radioactive material. In the case of Mock Iodine-125 reference or calibration source, the information accompanying the source must also contain directions to the licensee regarding the waste disposal requirements set out in 180 NAC 4-039.

6. The Radiation Safety Officer and/or authorized user must have training and experience requirements consistent with training specified in 180 NAC 15-019.01.

3-014.09 Licensing the Manufacture and Distribution of Ice Detection Devices. An application for a specific license to manufacture and distribute ice detection devices to persons generally licensed under 180 NAC 3-008.10 will be approved subject to the following conditions: (1) the applicant satisfies the general requirements of 180 NAC 3-011 and 180 NAC 3-012 the criteria of 10 CFR Chapter I, Part 30, § 30.33., and Part 32, s §32.61, 32.62, 32.103 . The Radiation Safety Officer and/or authorized user must have training and experience requirements consistent with training specified in 180 NAC 15-018.01.

3-014.10 Manufacture, Preparation, or Transfer for Commercial Distribution of Radioactive Drugs Containing Radioactive Material for Medical Use Under 180 NAC 7.

1. An application for a specific license to manufacture, prepare, or transfer for commercial distribution radioactive drugs containing radioactive material for use by persons authorized pursuant to 180 NAC 7, will be approved if:

   a. The applicant satisfies the general requirements specified in 180 NAC 3-011;
   b. The applicant submits evidence that the applicant is at least one of the following:

      (1) Registered or licensed with the U.S. Food and Drug Administration (FDA) as a drug manufacturer;
      (2) Registered or licensed with a state agency as a drug manufacturer;
      (3) Licensed according to 175 NAC 8, Pharmacies; or
      (4) Operating as a nuclear pharmacy within a Federal medical institution.

   c. The applicant submits information on the radionuclide; the chemical and physical form; the maximum activity per vial, syringe, generator, or other container of the radioactive drug; and the shielding provided by the

packaging to show it is appropriate for the safe handling and storage of the radioactive drugs by medical use licensees; and

d. The applicant satisfies the following labeling requirements:

(1) A label is affixed to each transport radiation shield, whether it is constructed of lead, glass, plastic, or other material, of a radioactive drug to be transferred for commercial distribution. The label must include the radiation symbol and the words “CAUTION, RADIOACTIVE MATERIAL” or “DANGER, RADIOACTIVE MATERIAL”; the name of the radioactive drug or its abbreviation; and the quantity of radioactivity at a specified date and time. For radioactive drugs with a half life greater than 100 days, the time may be omitted.

(2) A label is affixed to each syringe, vial or other container used to hold a radioactive drug to be transferred for commercial distribution. The label must include the radiation symbol and the words “CAUTION, RADIOACTIVE MATERIAL” or “DANGER, RADIOACTIVE MATERIAL” and an identifier that ensures that the syringe, vial, or other container can be correlated with the information on the transport radiation shield label.

2. A licensee described by 180 NAC 3-014.10, item 1.b.(3) or 1.b.(4).

a. May prepare radioactive drugs for medical use, as defined in 180 NAC 7-002, provided that the radioactive drug is prepared by either an authorized nuclear pharmacist, as specified in 180 NAC 3-014.10, item 1.b. and c, or an individual under the supervision of an authorized nuclear pharmacist as specified in 180 NAC 7-013.

b. May allow a pharmacist to work as an authorized nuclear pharmacist if:

(1) This individual qualifies as an authorized nuclear pharmacist as defined in 180 NAC 7-002;

(2) This individual meets the requirements specified in 180 NAC 7-066.15 and 7-066.12 and the licensee has received an approved license amendment identifying this individual as an authorized nuclear pharmacist, or

(3) This individual is designated as an authorized nuclear pharmacist in accordance with 180 NAC 3-014.10, item 2.c.

c. The actions authorized in 180 NAC 3-014.10, items 2.a. and b. are permitted in spite of more restrictive language in license conditions.

d. May designate a pharmacist (as defined in 180 NAC 7-002) as an authorized nuclear pharmacist if the individual is identified as of the effective date of Title 180 , as an “authorized user” on a nuclear pharmacy license issued by the Agency under 180 NAC 3.

e. Must provide to the Agency a copy of each individual’s certification by the Board of Pharmaceutical Specialties, the Agency, U.S. Nuclear Regulatory Commission, or any Agreement State license, or the permit issued by a licensee of broad scope, and a copy of the state pharmacy licensure or

registration, no later than 30 days after the date that the licensee allows, pursuant to 180 NAC 3-014.10, item 2.b.(1) and (3), the individual to work as an authorized nuclear pharmacist.

3. A licensee must possess and use instrumentation to measure the radioactivity of radioactive drugs. The licensee must have procedures for use of the instrumentation. The licensee must measure, by direct measurement or by combination of measurements and calculations, the amount of radioactivity in dosages of alpha-, beta-, or photon-emitting radioactive drugs prior to transfer for commercial distribution. In addition, the licensee must:

   a. Perform tests before initial use, periodically, and following repair, on each instrument for accuracy, linearity, and geometry dependence, as appropriate for the use of the instrument; and make adjustments when necessary; and
   b. Check each instrument for constancy and proper operation at the beginning of each day of use.

4. Nothing in 180 NAC 3-014.10 relieves the licensee from complying with applicable FDA, other Federal, and State requirements governing radioactive drugs.

3-014.11 Reserved

3-014.12. Manufacture and Distribution of Sources or Devices Containing Radioactive Material for Medical Use. An application for a specific license to manufacture and distribute sources and devices containing radioactive material to persons licensed pursuant to 180 NAC 7 for use as a calibration or reference source or for the uses listed in 180 NAC 7-044 and 7-046 will be approved if:

1. The applicant satisfies the general requirements in 180 NAC 3-011.
2. The applicant submits sufficient information regarding each type of source or device pertinent to an evaluation of its radiation safety, including:

   a. The radioactive material contained, its chemical and physical form, and amount,
   b. Details of design and construction of the source or device,
   c. Procedures for, and results of, prototype tests to demonstrate that the source or device will maintain its integrity under stresses likely to be encountered in normal use and accidents,
   d. For devices containing radioactive material, the radiation profile of a prototype device,
   e. Details of quality control procedures to assure that production sources and devices meet the standards of the design and prototype tests,
   f. Procedures and standards for calibrating sources and devices,
   g. Legend and methods for labeling sources and devices as to their radioactive content, and
   h. Instructions for handling and storing the source or device from the radiation safety standpoint; these instructions are to be included on a durable label attached to the source or device or attached to a permanent storage container for the source or device; provided, that instructions which are too lengthy for such label may be summarized on the label and printed in detail on a brochure which is referenced on the label.

3. The label affixed to the source or device, or to the permanent storage container for the source or device, contains information on the radionuclide, quantity, and date of assay, and a statement that the name of source or device is licensed by the Agency for distribution to persons licensed pursuant to 180 NAC 7 and 180 NAC 7-044 and 7-046 or under equivalent licenses of the U.S. Nuclear Regulatory Commission, or an Agreement State, provided that such labeling for sources which do not require long term storage may be on a leaflet or brochure which accompanies the source.

4. In the event the applicant desires that the source or device be required to be tested for leakage of radioactive material at intervals longer than six months, the applicant tmust include in his application sufficient information to demonstrate that such longer interval is justified by performance characteristics of the source or device or similar sources or devices and by design features that have a significant bearing on the probability or consequences of leakage of radioactive material from the source.

5. In determining the acceptable interval for test of leakage of radioactive material, the Agency will consider information that includes, but is not limited to:

   a. Primary containment or source capsule;
   b. Protection of primary containment;
   c. Method of sealing containment;
   d. Containment construction materials;
   e. Form of contained radioactive material;
   f. Maximum temperature withstood during prototype tests;
   g. Maximum pressure withstood during prototype tests;
   h. Maximum quantity of contained radioactive material;
   i. Radiotoxicity of contained radioactive material; and
   j. Operating experience with identical sources or devices or similarly designed and constructed sources or devices.

6. The Radiation Safety Officer and/or authorized user must have training and experience requirements consistent with training specified in 180 NAC 15-018.01.

3-014.13 Requirements for License to Manufacture and Distribute Industrial Products Containing Depleted Uranium for Mass-Volume Applications

1. An application for a specific license to manufacture industrial products and devices containing depleted uranium for use pursuant to 180 NAC 3-007.04 or equivalent regulations of the U.S. Nuclear Regulatory Commission or an Agreement State will be approved if:

   a. The applicant satisfies the general requirements specified in 180 NAC 3-011;

   b. The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control procedures, labeling or marking, proposed uses, and potential hazards of the industrial product or device to provide reasonable assurance that possession, use, or transfer of the depleted uranium in the product or device is not likely to cause any individual to receive in any period of one year a radiation dose in excess of 10% of the annual limits specified in 180 NAC 4-005.01; and

c. The applicant submits sufficient information regarding the industrial product or device and the presence of depleted uranium for a mass-volume application in the product or device to provide reasonable assurance that unique benefits will accrue to the public because of the usefulness of the product or device.

2. In the case of an industrial product or device whose unique benefits are questionable, the Agency will approve an application for a specific license under 180 NAC 3-014.13 only if the product or device is found to combine a high degree of utility and low probability of uncontrolled disposal and dispersal of significant quantities of depleted uranium into the environment.

3. The Agency may deny any application for a specific license under 180 NAC 3-014.13 if the end use or uses of the industrial product or device cannot be reasonably foreseen.

4. Each person licensed pursuant to 180 NAC 3-014.13 item 1 must:

a. Maintain the level of quality control required by the license in the manufacture of the industrial product or device, and in the installation of the depleted uranium into the product or device;

b. Label or mark each unit to: (a) Identify the manufacturer of the product or device and the number of the license under which the product or device was manufactured, the fact that the product or device contains depleted uranium, and the quantity of depleted uranium in each product or device; and (b) State that the receipt, possession, use, and transfer of the product or device are subject to a general license or the equivalent and the regulations of the U.S. Nuclear Regulatory Commission or of an Agreement State;

c. Assure that the depleted uranium before being installed in each product or device has been impressed with the following legend clearly legible through any plating or other covering: "Depleted Uranium";

d. Furnish:

(1) A copy of the general license contained in 180 NAC 3-007.04 and a copy of Agency Form NRH-11 to each person to whom he transfers depleted uranium in a product or device for use pursuant to the general license contained in 180 NAC 3-007.04; or

(2) A copy of the general license contained in the U.S. Nuclear Regulatory Commission or Agreement State's regulation equivalent to 180 NAC 3-007.04 and a copy of the U.S. Nuclear Regulatory Commission or Agreement State's certificate; or alternatively, furnish a copy of the general license contained in 180 NAC 3-007.04 and a copy of Agency Form NRH-11 to each person to whom he transfers depleted uranium in a product or device for use pursuant to the general license of the U.S. Nuclear Regulatory Commission or an Agreement State, with a note explaining that use of the product or device is regulated by the

U.S. Nuclear Regulatory Commission or an Agreement State under requirements substantially the same as those in 180 NAC 3-007.04;

e. Report to the Agency all transfers of industrial products or devices to persons for use under the general license in180 NAC 3-007.04. Such report must identify each general licensee by name and address, an individual by name and/or position who may constitute a point of contact between the Agency and the general licensee, the type and model number of device transferred, and the quantity of depleted uranium contained in the product or device. The report must be submitted within 30 days after the end of each calendar quarter in which such a product or device is transferred to the generally licensed person. If no transfers have been made to persons generally licensed under 180 NAC 3-007.04 during the reporting period, the report must so indicate;

f. File a report which identifies each general licensee by name and address, an individual by name and/or position who may constitute a point of contact between the agency and the general licensee, the type and model number of the device transferred, and the quantity of depleted uranium contained in the product or device. The report must be submitted within 30 days after the end of each calendar quarter in which such product or device is transferred to the generally licensed person. The licensee must report:

(1) To the U.S. Nuclear Regulatory Commission all transfers of industrial products or devices to persons for use under the U.S. Nuclear Regulatory Commission general license in § 40.25 of 10 CFR Part 40;

(2) To the responsible State agency all transfers of devices manufactured and distributed pursuant to 180 NAC 3-014.13 for use under a general license in that State's regulations equivalent to180 NAC 3-007.04;

(3) To U.S. Nuclear Regulatory Commission if no transfers have been made by the licensees during the reporting period;

(4) To the responsible Agreement State Agency, upon the request of the Agency, if no transfers have been made to general licensees within a particular Agreement State during the reporting period; and

5. Keep records showing the name, address, and point of contact for each general licensee to whom he transfers depleted uranium in industrial products or devices for use pursuant to the general license provided in 180 NAC 3-008.04 or equivalent regulations of the U.S. Nuclear Regulatory Commission or of an Agreement State. The records must be maintained for a period of two years and must show the date of each transfer, the quantity of depleted uranium in each product or device transferred, and compliance with the report requirements.

6. The Radiation Safety Officer and/or authorized user must have training and experience consistent with the requirements of training specified in 180 NAC 15-018.01.

3-015 SPECIAL REQUIREMENTS FOR ISSUANCE OF SPECIFIC LICENSES FOR SOURCE MATERIAL MILLING: In addition to the requirements set forth in180 NAC 3-011, a specific license for source material milling will be issued if the applicant submits to the agency a satisfactory application as described herein and meets the other conditions specified below:

3-015.01 An Application for a License to Receive Title to, Receive, Possess, and Use Source Material for Milling or Byproduct Material as Defined in 180 NAC 1-002 must address the following:

1. Description of the proposed project or action;
2. Area/site characteristics including geology, topography, hydrology, and
3. Radiological and nonradiological impacts of the proposed project or action, including waterway and groundwater impacts;
4. Environmental effects of accidents;
5. Long-term impacts including decommissioning, decontamination, and reclamation; and meteorology;
6. Site and project alternatives.

3-015.02 Pursuant to 180 NAC 3-011.05, the applicant must not commence construction of the project until the Agency has weighed the environmental, economic, technical, and other benefits against the environmental costs and has concluded that the issuance of the license is appropriate.

3-015.03 At least 1 full year prior to any major site construction, a pre-operational monitoring program must be conducted to provide complete baseline data on a milling site and its environs. Throughout the construction and operating phases of the mill, an operational monitoring program must be conducted to measure or evaluate compliance with applicable standards and regulations; to evaluate performance of control systems and procedures; to evaluate environmental impacts of operation; and to detect potential long-term effects.

3-015.04 Prior to issuance of the license, the applicant must establish financial surety arrangements consistent with the requirements of 180 NAC 3-011.06.

1. The amount of funds to be ensured by financial surety arrangements will be based on Agency-approved cost estimates in an approved plan for decontamination and decommissioning of mill buildings and the milling site to levels which would allow unrestricted use of these areas upon decommissioning, and the reclamation of tailings and/or waste disposal areas. The licensee must submit this plan in conjunction with an environmental report that addresses the expected environmental impacts of the milling operation, decommissioning and tailings reclamation, and that evaluates alternatives for mitigating these impacts. In establishing specific surety arrangements, the licensee's cost estimates will take into account total costs that would be incurred if an independent contractor were hired to perform the decommissioning and reclamation work. In order to avoid unnecessary duplication and expense, the Agency may accept financial sureties that have been consolidated with financial surety arrangements established to meet requirements of other Federal or State agencies and/or local governing bodies for such decommissioning, decontamination, reclamation, and long-term site surveillance, provided such arrangements are considered adequate to satisfy these requirements and that portion of the surety which covers the decommissioning and reclamation of the mill, mill tailings site and associated areas, and the long-term

funding charge are clearly identified. The licensee's surety mechanism will be reviewed annually by the Agency to assure that sufficient funds will be available for completion of the reclamation plan if the work had to be performed by an independent contractor. The amount of surety liability should be adjusted to recognize any increases or decreases resulting from inflation, changes in engineering plans, activities performed, and any other conditions affecting costs. Regardless of whether reclamation is phased through the life of the operation or takes place at the end of operations, an appropriate portion of surety liability will be retained until final compliance with the reclamation plan is determined. This will yield a surety that is at least sufficient at all times to cover the costs of decommissioning, decontamination, and reclamation of the areas that are expected to be disturbed before the next license renewal. The term of the surety mechanism must be open ended, unless it can be demonstrated that another arrangement would provide an equivalent level of assurance. This assurance could be provided with a surety instrument which is written for a specified period of time (e.g., 5 years) which must be automatically renewed unless the surety agent notifies the beneficiary (the State regulatory agency) and the principal (the licensee) some reasonable time (e.g., 90 days) prior to the renewal date of their intention not to renew. In such a situation, the surety requirement still exists and the licensee would be required to submit an acceptable replacement surety within a brief period of time to allow at least 60 days for the regulatory agency to collect.

2. The total amount of funds for reclamation or long term surveillance and control will be transferred to the United States if title and custody of such material and its disposal site is transferred to the United States upon termination of a license. Such funds include, but are not limited to, sums collected for long term surveillance and control. Such funds do not, however, include monies held as surety where no default has occurred, and the reclamation or other bonded activity has been performed.

3-015.05 The applicant must provide procedures describing the means employed to meet the following requirements during the operational phase of any project.

1. Milling operations must be conducted so that all effluent releases are below the limits of 180 NAC 4 and are as low as is reasonably achievable.
2. The mill operator must conduct daily inspections of any tailings or waste retention systems. Such inspections must be conducted by a qualified engineer or scientist. Records of such inspections must be maintained for review by the Agency.
3. The mill operator must immediately notify the Agency of the following:

    a. Any failure in a tailings or waste retention system which results in a release of tailings or waste into unrestricted areas, and
    b. Any unusual conditions or conditions not contemplated in the design of the retention system which, if not corrected, could lead to failure of the system and result in a release of tailings or waste into unrestricted areas.

3-015.06 Continued Surveillance Requirements for Source Material Millings Having Reclaimed Residues.

1. The final disposition of tailings or wastes at source material milling sites should be such that the need for ongoing active maintenance is not necessary to preserve

isolation. As a minimum, annual site inspections must be conducted by the government agency retaining ultimate custody of the site where tailings or wastes are stored to confirm the integrity of the stabilized tailings or waste systems and to determine the need, if any, for maintenance and/or monitoring. Results of the inspection must be reported to the Agency within 60 days following each inspection. The Agency may require more frequent site inspections, if, on the basis of a site-specific evaluation, such a need appears necessary due to the features of a particular tailings or waste disposal system.

2. If site surveillance or control requirements at a particular site are determined, on the basis of a site-specific evaluation, to be significantly greater than those specified in, 180 NAC 3-015.06, item 1 additional funding requirements may be specified by the Agency. The charge will be reviewed annually to recognize or adjust for inflation.

3-016 ISSUANCE OF SPECIFIC LICENSES

3-016.01 Upon a determination that an application meets the requirements of the Act and the regulations of the Agency, the Agency will issue a specific license authorizing the proposed activity in such form and containing such conditions and limitations as it deems appropriate or necessary, based on quantities and types of radioactive materials, proposed use and upon the training and experience of the user(s).

3-016.02 The Agency may incorporate in any license at the time of issuance, or thereafter by appropriate rule, regulation, or order, such additional requirements and conditions with respect to the licensee's receipt, possession, use and transfer of radioactive material including the requirement of reports, keeping of records and to provide for inspections as it deems appropriate or necessary in order to:

1. Minimize danger to public health and safety or property; and
2. Prevent loss or theft of material subject to 180 NAC 3-016.02.

3-017 SPECIFIC TERMS AND CONDITIONS OF LICENSE

3-017.01 Each license issued pursuant to 180 NAC 3, 5, 7, 12, 14 and 19 will be subject to all the provisions of the Act, now or hereafter in effect, and to all rules, regulations, and orders of the Agency.

3-017.02 No license issued or granted under 180 NAC 3, 5, 7, 12, 14, and 19 and no right to possess or utilize radioactive material granted by any license issued pursuant to 180 NAC 3, 5, 7, 12, 14, and 19 may be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person unless the Agency , after securing full information find that the transfer is in accordance with the provisions of the Act, gives its consent in writing.

3-017.03 Each person licensed by the Agency pursuant to,180 NAC 3, 5, 7, 12, 14 and 19 must confine his use and possession of the material licensed to the locations and purposes authorized in the license.

3-017.04 Each licensee must notify the Agency in writing when the licensee decides to permanently discontinue all activities involving materials under the license. This notification requirement applies to all specific licenses issued under,180 NAC 3, 5, 7, 12, 14, and 19.

3-017.05 Each general licensee that is required to register by 180 NAC 3-005 and each specific licensee must notify the Agency, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any Chapter of Title 11 (Bankruptcy) of the United States Code by or against:

1. The licensee;
2. An entity (as that term is defined in 11 U.S.C. 101(15)) (attached hereto as Attachment Number 3-1 and incorporated herein by this reference) controlling the licensee or listing the license or licensee as property of the estate; or
3. An affiliate (as that term is defined in 11 U.S.C. 101(2)) (attached hereto as Attachment Number 3-1 and incorporated herein by this reference) of the licensee.
4. This notification must indicate:

    a. The bankruptcy court in which the petition for bankruptcy was filed; and
    b. The date of the filing of the petition.

3-018 FINANCIAL ASSURANCE AND RECORDKEEPING FOR DECOMMISSIONING

3-018.01 Each applicant for a specific license authorizing the possession and use of unsealed byproduct material of half-life greater than 120 days and in quantities exceeding 10^5 times the applicable quantities set forth in 180 NAC 4, Appendix 4-F must submit a decommissioning funding plan as described in 180 NAC 3-018.05. The decommissioning funding plan must also be submitted when a combination of isotopes is involved if R divided by 10^5 is greater than 1 (unity rule), where R is defined here as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix 4-F of 180 NAC 4.

3-018.02 Each applicant for a specific license authorizing possession and use of byproduct material of half-life greater than 120 days and in quantities specified in 180 NAC 3-018.04 must either-

1. Submit a decommissioning funding plan as described in 180 NAC 3-018.05 or
2. Submit a certification that financial assurance for decommissioning has been provided in the amount prescribed by 180 NAC 3-018.04 using one of the methods described in 180 NAC 3-018.06. For an applicant, this certification may state that the appropriate assurance will be obtained after the application has been approved and the license issued but prior to the receipt of radioactive material. If the applicant defers execution of the financial instrument until after the license has been issued, a signed original of the financial instrument obtained to satisfy 180 NAC 3-018.06 must be submitted to the Agency before receipt of radioactive material. If the applicant does not defer execution of the financial instrument, the applicant must submit to the Agency as part of the certification, a signed original of the financial instrument obtained to satisfy the requirements of 180 NAC 3-018.06.

3-018.03 Each holder of a specific license:

1. Issued on or after May 30, 1994 and of a type described in 180 NAC 3-018.01 or 3-018.02, must provide financial assurance for decommissioning in accordance with the criteria set for 180 NAC 3-018.03.
2. Issued before May 30, 1994, and of a type described in 180 NAC 3-018.01 must submit, on or before May 30, 1994, a decommissioning funding plan or a

certification of financial assurance for decommissioning in an amount at least equal to $750,000 in accordance with the criteria set forth in 180 NAC 3-018.03, item 2. If the licensee submits the certification of financial assurance rather than a decommissioning funding plan, the licensee must include a decommissioning funding plan in any application for license renewal.

3. Issued before May 30, 1994, and of a type described in 180 NAC 3-018.02 must submit, on or before May 30, 1994, a certification of financial assurance for decommissioning in accordance with the criteria set forth in 180 NAC 3-018.03.

3-018.04 Table of required amounts of financial assurance for decommissioning by quantity of material.

Greater than 10^4 but less than or equal to 10^5 times the applicable quantities of 180 NAC 4, Appendix 004-F in unsealed form. (For a combination of isotopes, if R, as defined in 180 NAC 3-018.01, divided by 10^4 is greater than 1 but R divided by 10^5 is less than or equal to 1.)	$750,000
Greater than 10^3 but less than or equal to 10^4 times the applicable quantities of 180 NAC 4, Appendix 4-F in unsealed form. (For a combination of isotopes, if R, as defined in 180 NAC 3-018.01, divided by 10^3 is greater than 1 but R divided by 10^4 is less than or equal to 1.)	$150,000
Greater than 10^{10} times the applicable quantities of 180 NAC 4, Appendix 4-F in sealed sources or plated foils. (For a combination of isotopes, if R, as defined in180 NAC 3-018.01, divided by 10^{10} is greater than 1.)	$75,000

3-018.05 Each decommissioning funding plan must contain a cost estimate for decommissioning and a description of the method of assuring funds for decommissioning from 180 NAC 3-018.06, including means of adjusting cost estimates and associated funding levels periodically over the life of the facility. The decommissioning funding plan must also contain a certification by the licensee that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning and a signed original of the financial statement obtained to satisfy the requirements of 180 NAC 3-018.06.

3-018.06 Financial assurance for decommissioning must be provided by one or more of the following methods:

1. Prepayment. Prepayment is the deposit prior to the start of operation into an account segregated from licensee assets and outside the licensee's administrative control of cash or liquid assets such that the amount of funds would be sufficient to pay decommissioning costs. Prepayment may be in the form of a trust, escrow

account, government fund, certificate of deposit, or deposit of government securities.

2. A surety method, insurance, or other guarantee method. These methods guarantee that decommissioning costs will be paid. A surety method may be in the form of a surety bond, letter of credit, or line of credit. A parent company guarantee of funds for decommissioning costs based on a financial test may be used if the guarantee and test are as contained in 180 NAC 3, Appendix 3-A. A parent company guarantee may not be used in combination with other financial methods to satisfy the requirements of 180 NAC 3-018.06, item 2. A guarantee of funds by the applicant or licensee for decommissioning based on a financial test may be used if the guarantee and test are as contained in 180 NAC 3, Appendix 3-D. A guarantee by the applicant or licensee may not be used in combination with any other financial methods to satisfy the requirements of 180 NAC 3-018.06, item 2 or in any situation where the applicant or licensee has a parent company holding majority control of the voting stock of the company. Any surety method or insurance used to provide financial assurance for decommissioning must contain the following conditions:

   a. The surety method or insurance must be open-ended or, if written for a specified term, such as five years, must be renewed automatically unless 90 days or more prior to the renewal date, the issuer notifies the Agency, the beneficiary, and the licensee of its intention not to renew. The surety method or insurance must also provide that the full face amount be paid to the beneficiary automatically prior to the expiration without proof of forfeiture if the licensee fails to provide a replacement acceptable to the Agency within 30 days after receipt of notification of cancellation.

   b. The surety method or insurance must be payable to a trust established for decommissioning costs. The trustee and trust must be acceptable to the Agency. An acceptable trustee includes an appropriate State or Federal government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

   c. The surety method or insurance must remain in effect until the Agency has terminated the license.

3. An external sinking fund in which deposits are made at least annually, coupled with a surety method or insurance, the value of which may decrease by the amount being accumulated in the sinking fund. An external sinking fund is a fund established and maintained by setting aside funds periodically in an account segregated from licensee assets and outside the licensee's administrative control in which the total amount of funds would be sufficient to pay decommissioning costs at the time termination of operation is expected. An external sinking fund may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities. The surety or insurance provisions must be as stated in 180 NAC 3-018.06, item 2.

4. In the case of Federal, State, or local government licensees, a statement of intent containing a cost estimate for decommissioning or an amount based on the Table in

180 NAC 3-018.04, and indicating that funds for decommissioning will be obtained when necessary.

3-018.07 Each person licensed under 180 NAC 3, 5, 7, 14 and 19 must keep records of information important to the decommissioning of the facility in an identified location until the site is released for unrestricted use. Before licensed activities are transferred or assigned in accordance with 180 NAC 3-017.02, licensees must transfer all records described in 180 NAC 3-018.07 to the new licensee. In this case, the new licensee will be responsible for maintaining these records until the license is terminated. If records important to the decommissioning of a facility are kept for other purposes, reference to these records and their locations may be used. Information the Agency considers important to decommissioning consists of:

1. Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records may be limited to instances when contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas as in the case of possible seepage into porous materials such as concrete. These records must include any known information on identification of involved nuclides, quantities, forms, and concentrations.

2. As-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used and/or stored and of locations of possible inaccessible contamination such as buried pipes which may be subject to contamination. If required drawings are referenced, each relevant document need not be indexed individually. If drawings are not available, the licensee must substitute appropriate records of available information concerning these areas and locations.

3. Except for areas containing only sealed sources (provided the sources have not leaked or no contamination remains after any leak) or byproduct materials having only half-lives of less than 65 days, a list contained in a single document and updated every 2 years, of the following:

   a. All areas designated and formerly designated as restricted areas as defined under 180 NAC 1-002 ;
   b. All areas outside of restricted areas that require documentation under 180 NAC 3-018.07, item 1.;
   c. All areas outside of restricted areas where current and previous wastes have been buried as documented under 180 NAC 4-054; and
   d. All areas outside of restricted areas which contain material such that, if the license expired, the licensee would be required to either decontaminate the area to unrestricted release levels or apply for approval for disposal under 180 NAC 4-040.

4. Records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds if either a funding plan or certification is used.

3-019 EXPIRATION AND TERMINATION OF LICENSES AND DECOMMISSIONING OF SITES AND SEPARATE BUILDINGS OR OUTDOOR AREAS

3-019.01 Each specific license expires at the end of the day on the expiration date stated in the license unless the licensee has filed an application for renewal under 180 NAC 3-020 not less than 30 days before the expiration date stated in the existing license. If an application for renewal has been filed at least 30 days prior to the expiration date stated in the existing license, the existing license expires at the end of the day on which the Agency makes a final determination to deny the renewal application or if the determination states an expiration date, the expiration date stated in the determination.

3-019.02 Each specific license revoked by the Agency expires at the end of the day on the date of the Agency's final determination to revoke the license, or on the expiration date stated in the determination, or as otherwise provided by Agency Order.

3-019.03 Each specific license continues in effect, beyond the expiration date if necessary, with respect to possession of radioactive material until the Agency notifies the licensee in writing that the license is terminated. During this time, the licensee must-

1. Limit actions involving radioactive material to those related to decommissioning; and
2. Continue to control entry to restricted area until they are suitable for release in accordance with Agency requirements.

3-019.04 Within 60 days of the occurrence of any of the following, consistent with the administrative directions in 180 NAC 1-012, each licensee must provide notification to the Agency in writing of such occurrence, and either begin decommissioning its site, or any separate building or outdoor area that contains residual radioactivity so that the building or outdoor area is suitable for release in accordance with Agency requirements, or submit within 12 months of notification a decommissioning plan, if required by 180 NAC 3-019.07 and begin decommissioning upon approval of that plan if -

1. The license has expired pursuant to180 NAC 3-019.01 and 3-019.02; or
2. The licensee has decided to permanently cease principal activities, as defined in 180 NAC 3-002, at the entire site or in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance Agency requirements; or
3. No principal activities under the license have been conducted for a period of 24 months; or
4. No principal activities have been conducted for a period of 24 months in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with Agency requirements.

3-019.05 Coincident with the notification required by 180 NAC 3-019.04, the licensee must maintain in effect all decommissioning financial assurances established by the licensee pursuant to 180 NAC 3-018 in conjunction with a license issuance or renewal or as required by 180 NAC 3-019.05. The amount of the financial assurance must be increased, or may be decreased, as appropriate, to cover the detailed cost estimate for decommissioning established pursuant to 180 NAC 3-019.07, item 4.e.

1. Any licensee who has not provided financial assurance to cover the detailed cost estimate submitted with the decommissioning plan must do so effective September 17, 1997.

2. Following approval of the decommissioning plan, a licensee may reduce the amount of the financial assurance as decommissioning proceeds and radiological contamination is reduced at the site with the approval of the Agency.

3-019.06 The Agency may grant a request to extend the time periods established in 180 NAC 3-019.04 if the Agency determines that this relief is not detrimental to the public health and safety and is otherwise in the public interest. The request must be submitted no later than 30 days before notification pursuant to 180 NAC 3-019.04. The schedule for decommissioning set forth in 180 NAC 3-019.04 may not commence until the Agency has made a determination on the request.

3-019.07 Decommissioning Plans

1. A decommissioning plan must be submitted if required by license condition or if the procedures and activities necessary to carry out decommissioning of the site or separate building or outdoor area have not been previously approved by the Agency and these procedures could increase potential health and safety impacts to workers or to the public; such as in the following cases;

   a. Procedures would involve techniques not applied routinely during cleanup or maintenance operations;
   b. Workers could be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation;
   c. Procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or
   d. Procedures could result in significantly greater releases of radioactive materials to the environment than those associated with operation.

2. The Agency may approve an alternate schedule for submittal of a decommissioning plan required pursuant to 180 NAC 019.04 if the Agency determines that the alternative schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the public health and safety and is otherwise in the public interest.

3. Procedures such as those listed in 180 NAC 3-019.07, item 1 with potential health and safety impacts may not be carried out prior to the approval of the decommissioning plan.

4. The proposed decommissioning plan for the site or separate building or outdoor area must include:

   a. A description of the conditions of the site or separate building or outdoor area sufficient to evaluate the acceptability of the plan;
   b. A description of planned decommissioning activities;
   c. A description of methods used to ensure the protection of workers and the environment against radiation hazards during decommissioning;
   d. A description of the planned final radiation survey; and
   e. An updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and a plan for

assuring the availability of adequate funds for completion of decommissioning.

f. For decommissioning plans calling for completion of decommissioning later than 24 months after plan approval, the plan must include a justification for the delay based on the criteria in 180 NAC 3-019.09.

5. The proposed decommissioning plan will be approved by the Agency if the information therein demonstrates that the decommissioning will be completed as soon as practicable and that the health and safety of workers and the public will be adequately protected.

3-019.08 Decommissioning

1. Except as provided in 180 NAC 3-019.09, licensees must complete decommissioning of the site or separate building or outdoor area as soon as is practicable but no later than 24 months following the initiation of decommissioning.

2. Except as provided in 180 NAC 3-019.09, when decommissioning involves the entire site, the licensee must request license termination as soon as practicable but no later than 24 months following the initiation of decommissioning.

3-019.09 The Agency may approve a request for an alternative schedule for completion of decommissioning of the site or separate building or outdoor area, and license termination if appropriate, if the Agency determines that the alternative is warranted by consideration of the following:

1. Whether it is technically feasible to complete decommissioning within the allotted 24 month period;
2. Whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted 24 month period;
3. Whether a significant volume reduction in wastes requiring disposal will be achieved by allowing short-lived radionuclides to decay;
4. Whether a significant reduction in radiation exposure to workers can be achieved by allowing short-lived radionuclides to decay; and
5. Other site-specific factors which the Agency may consider appropriate on a case-by-case basis, such as the regulatory requirements of other government agencies, lawsuits, ground-water treatment activities, monitored natural ground-water restoration, actions that could result in more environmental harm than deferred cleanup, and other factors beyond the control of the licensee.

3-019.10 As the final step in decommissioning, the licensee must -

1. Certify the disposition of all licensed material, including accumulated wastes, by submitting a completed Agency Form NRH-60 or equivalent information; and

2. Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey unless the licensee demonstrates that the premises are suitable for release in some other manner. The licensee must, as appropriate -

a. Report levels of gamma radiation in units of millisieverts (microroentgen) per hour at one meter from surfaces, and report levels of radioactivity, including alpha and beta, in units of megabecquerels (disintegrations per minute or microcuries) per 100 square centimeters - removable and fixed - for surfaces, megabecquerels (microcuries) per milliliter for water, becquerels (picocuries) per gram for solids such as soil or concrete; and

b. Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

3-019.11 Specific licenses, including expired licenses, will be terminated by written notice to the licensee when the Agency determines:

1. Radioactive material has been properly disposed;

2. Reasonable effort has been made to eliminate residual radioactive contamination, if present; and

3. Demonstration of suitability for release.

a. A radiation survey has been performed which demonstrates that the premises are suitable for release in accordance with Agency requirements; or
b. Other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with Agency requirements.

4. Records required by 180 NAC 3-030.06 and 3-030.08 have been received.

3-020 RENEWAL OF LICENSES

3-020.01 Applications for renewal of specific licenses must be filed in accordance with 180 NAC 3-010.

3-020.02 In any case in which a licensee, not less than 30 days prior to expiration of the existing license, has filed an application in proper form for renewal or for a new license authorizing the same activities, such existing license will not expire until the application has been finally determined by the Agency.

3-021 AMENDMENT OF LICENSES AT REQUEST OF LICENSEE: Applications for amendment of a license must be filed in accordance with 3-010 and must specify the respects in which the licensee desires his license to be amended and the grounds for such amendment.

3-022 AGENCY ACTION ON APPLICATIONS TO RENEW AND AMEND: In considering an application by a licensee to renew or amend his license, the Agency will apply the criteria set forth in 180 NAC 3-011, 3-013 or 3-014, and 3-015 and in 180 NAC 5, 7, 12, 14 or 19 as applicable.

3-023 RESERVED

3-024 RESERVED

3-025 TRANSFER OF MATERIAL

3-025.01 No licensee shall transfer radioactive material except as authorized pursuant to180 NAC 3-025.

3-025.02 Except as otherwise provided in his license and subject to the provisions of 180 NAC 3-025.03 and 3-025.04, any licensee may transfer radioactive material:

1. To the Agency;[11]
2. To the U.S. Department of Energy;
3. To any person exempt from the regulations to the extent permitted under such exemption;
4. To any person authorized to receive such material under terms of a general license or its equivalent, or a specific license or equivalent licensing document, issued by the Agency, the U.S. Nuclear Regulatory Commission, or any Agreement State, or to any person otherwise authorized to receive such material by the Federal Government or any agency thereof, the Agency, or any Agreement State, or
5. As otherwise authorized by the Agency in writing.
6. To the agency in any Agreement State which regulates radioactive material pursuant to an agreement under § 274 of the Atomic Energy Act of 1954[12]

3-025.03 Before transferring radioactive material to a specific licensee of the Agency, the U.S. Nuclear Regulatory Commission, or an Agreement State, or to a general licensee who is required to register with the Agency, the U.S. Nuclear Regulatory Commission, or an Agreement State prior to receipt of the radioactive material, the licensee transferring the material must verify that the transferee's license authorizes the receipt of the type, form, and quantity of radioactive material to be transferred.

3-025.04 The following methods for the verification required by 180 NAC 3-025.03 are acceptable:

1. The transferor may have in his possession, and read, a current copy of the transferee's specific license or registration certificate;
2. The transferor may have in his possession a written certification by the transferee that he is authorized by license or registration certificate to receive the type, form, and quantity of radioactive material to be transferred, specifying the license or registration certificate number, issuing agency, and expiration date;
3. For emergency shipments the transferor may accept oral certification by the transferee that he is authorized by license or registration certificate to receive the type, form, and quantity of radioactive material to be transferred, specifying the license or registration certificate number, issuing agency, and expiration date; provided, that the oral certification is confirmed in writing within ten (10) days;
4. The transferor may obtain other sources of information compiled by a reporting service from official records of the Agency, the U.S. Nuclear Regulatory Commission, the licensing agency of an Agreement State as to the identity of licensees and the scope and expiration dates of licenses and registration; or

[11]A licensee may transfer material to the Agency only after receiving prior approval from the Agency.
[12]Ibid. p. 3-52

5. When none of the methods of verification described in 180 NAC 3-025.04, items 1. through 4. are readily available or when a transferor desires to verify that information received by one of such methods is correct or up-to-date, the transferor may obtain and record confirmation from the Agency, the U.S. Nuclear Regulatory Commission, or the licensing agency of an Agreement State that the transferee is licensed to receive the radioactive material.

3-025.05 Preparation for shipment and transport of radioactive material must be in accordance with the provisions of 180 NAC 13.

3-026 REPORTING REQUIREMENTS

3-026.01 Immediate Report: Each licensee must notify the Agency as soon as possible but not later than four hours after the discovery of an event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits or releases of radioactive material that could exceed regulatory limits (events may include fires, explosions, toxic gas releases, etc.).

3-026.02 Twenty-Four Hour Report: Each licensee must notify the Agency within 24 hours after the discovery of any of the following events involving radioactive material:

1. An unplanned contamination event that:

   a. Requires access to the contaminated area, by workers or the public, to be restricted for more than 24 hours by imposing additional radiological controls or by prohibiting entry into the area;
   b. Involves a quantity of material greater than five times the lowest annual limit on intake specified in 180 NAC 4, Appendix 4-B for the material; and
   c. Has access to the area restricted for a reason other than to allow isotopes with a half-life of less than 24 hours to decay prior to decontamination.

2. An event in which equipment is disabled or fails to function as designed when:

   a. The equipment is required by regulation or license condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive materials exceeding regulatory limits, or to mitigate the consequences of an accident;
   b. The equipment is required to be available and operable when it is disabled or fails to function; and
   c. No redundant equipment is available and operable to perform the required safety function.

3. An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.
4. An unplanned fire or explosion damaging any radioactive material or any device, container, or equipment containing radioactive material when:

   a. The quantity of radioactive material involved is greater than five times the lowest annual limit on intake specified in 180 NAC 4, Appendix 4-B for the material; and

b. The damage affects the integrity of the radioactive material or its container.

3-026.03 Preparation and submission of reports: Reports made by licensees in response to the requirements of 180 NAC 3-026.03 must be made as follows:

1. Licensees must make reports required by 180 NAC 3-026.01 and 3-026.02 by telephone to the Agency.[13] To the extent that the information is available at the time of notification, the information provided in these reports must include:

   a. The caller's name and call back telephone number;
   b. A description of the event, including date and time;
   c. The exact location of the event;
   d. The isotopes, quantities, and chemical and physical form of the radioactive material involved; and
   e. Any personnel radiation exposure data available.

2. Written report. Each licensee who makes a report required by 180 NAC 3-026.01 or 180 NAC 3-026.02 must submit a written follow-up report within 30 days of the initial report. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the reports contain all of the necessary information and the appropriate distribution is made. These written reports must be sent to:

   Department of Health and Human Services Regulation and Licensure
   Public Health Assurance Division
   301 Centennial Mall South
   P.O. Box 95007
   Lincoln, NE 68509-5007

   The reports must include the following:

   a. A description of the event, including the probable cause and the manufacturer and model number, if applicable, of any equipment that failed or malfunctioned;
   b. The exact location of the event;
   c. The isotopes, quantities, and chemical and physical form of the radioactive material involved;
   d. Date and time of the event;
   e. Corrective actions taken or planned and the results of any evaluations or assessments; and
   f. The extent of exposure of individuals to radiation or to radioactive materials without identification of individuals by name.

3-027 MODIFICATION AND REVOCATION OF LICENSES: The terms and conditions of all licenses shall be subject to amendment, revision, modification, limitation, suspension or revocation upon:

3-027.01 Amendments to the Radiation Control Act or the rules and regulations adopted pursuant thereto;

[13]The telephone number for the Agency is (402) 471-2168.

3-027.02 Voluntary application for license amendment, revision, modification, limitation, suspension or surrender made by the licensee;

3-027.03 Disciplinary action pursuant to 180 NAC 17 ;or

3-027.04 Pursuant to emergency order as provided by § 71-3513(6) of the Act.

RECIPROCITY

3-028 RECIPROCAL RECOGNITION OF LICENSES

3-028.01 Licenses of Radioactive Material Except Special Nuclear Material in Quantities Sufficient to Form a Critical Mass

1. Subject to Title 180, any person who holds a specific license from the U.S. Nuclear Regulatory Commission or any Agreement State, and issued by the Agency having jurisdiction where the licensee maintains an office for directing the licensed activity and at which radiation safety records are normally maintained, is hereby granted a general license to conduct the activities authorized in such licensing document within this State for a period not in excess of 180 days in any calendar year provided that:

   a. The licensing document does not limit the activity authorized by such document to specified installations or locations;
   b. The out-of-state licensee notifies the Agency in writing at least three (3) days prior to engaging in such activity. Such notification must include:

      (1) Name of company for whom services will be performed, an individual to be contacted representing the company and telephone number.
      (2) The exact location, start date, duration, and type of activity to be conducted.
      (3) The name(s), documentation of training, and in-state address(es) of the individual(s) performing the activity,
      (4) The identification of the sources of radiation to be used,
      (5) A copy of the pertinent license,
      (6) A copy of the licensee's operating and emergency procedures, and
      (7) An annual fee as specified in 180 NAC 18 .
      (8) The out-of-state licensee notifies the Agency of changes in work locations, radioactive material, or work activities different from the information contained on the initial notification.

      If, for a specific case, the three (3) day period would impose an undue hardship on the out-of-state licensee, the licensee may, upon application to the Agency, obtain permission to proceed sooner. The Agency may waive the requirement for filing additional written notifications during the remainder of the calendar year following the receipt of the initial notification from a person engaging in activities under the general license provided in180 NAC 3-028.01.

c. The out-of-state licensee complies with all applicable regulations of the Agency and with all the terms and conditions of the licensing document, except any such terms and conditions which may be inconsistent with applicable regulations of the Agency;
d. The out-of-state licensee maintains a current copy of the appropriate license, and all amendments thereto, issued by the Agency;
e. The out-of-state licensee supplies such other information as the Agency may request;
f. The out-of-state licensee must not transfer or dispose of radioactive material possessed or used under the general license provided in 180 NAC 3-028.01, item 1 except by transfer to a person:

(1) Specifically licensed by the Agency or by the U.S. Nuclear Regulatory Commission to receive such material, or
(2) Exempt from the requirements for a license for such material under 180 NAC 3-004.01.

2. Notwithstanding the provisions of 180 NAC 3-028.01, item 1 any person who holds a specific license issued by the U.S. Nuclear Regulatory Commission or an Agreement State authorizing the holder to manufacture, transfer, install, or service a device described in 180 NAC 3-008.04, item 1 within areas subject to the jurisdiction of the licensing body is hereby granted a general license to install, transfer, demonstrate or service such a device in this State provided that:

a. Such person must file a report with the Agency within 30 days after the end of each calendar quarter in which any device is transferred to or installed in this State. Each such report must identify each general licensee to whom such device is transferred by name and address, the type and model of device transferred, and the quantity and type of radioactive material contained in the device;
b. The device has been manufactured, labeled, installed, and serviced in accordance with applicable provisions of the specific license issued to such person by the U.S. Nuclear Regulatory Commission or an Agreement State;
c. Such person must assure that any labels required to be affixed to the device under regulations of the authority which licensed manufacture of the device bear a statement that "Removal of this label is prohibited"; and
d. The holder of the specific license must furnish to each general licensee to whom he transfers such device or on whose premises he installs such device a copy of the general license contained in 180 NAC 3-008.04.

3. The Agency may withdraw, limit, or qualify its acceptance of any specific license or equivalent licensing document issued by another agency, or any product distributed pursuant to such licensing document, upon determining that such action is necessary in order to achieve compliance with Title 180 or to prevent undue hazard to public health and safety or property.

3-028.02 Recognition of Agreement State Licensees

1. Before radioactive materials can be used at a temporary job site within the State at any Federal facility, the jurisdictional status of the job site must be determined. If the

jurisdictional status is unknown, the Federal agency should be contacted to determine if the job site is under exclusive Federal jurisdiction.

a. In areas of exclusive Federal jurisdiction, the general license is subject to all the applicable rules, regulations, orders and fees of the U.S. Nuclear Regulatory Commission, and
b. Authorizations for use of radioactive materials at job sites under exclusive Federal jurisdiction must be obtained from the U.S. Nuclear Regulatory Commission by either (1) filing a NRC Form-241 in accordance with 10 CFR 150.20(b); or (2) by applying for a specific U.S. Nuclear Regulatory Commission license.

2. Before radioactive material can be used at a temporary job site in another State, authorization must be obtained for the State if it is an Agreement State, or from the U.S. Nuclear Regulatory Commission for any non-Agreement State, either by filing for reciprocity or applying for a specific license.

3-029 RESERVED

3-030 RECORDS

3-030.01 Each person who receives radioactive material pursuant to a license issued pursuant to 180 NAC 3, 5, 7, 12, 14, and 19 must keep records showing the receipt, use, transfer, and disposal of such radioactive material.

3-030.02 Records which are required pursuant to 180 NAC 3-030.01 must be maintained for the period specified by the appropriate regulation. If a retention period is not otherwise specified by regulation such records must be maintained for a period of one year after the records of the licensee have been inspected by the Agency unless any litigation, claim, negotiation, audit, licensure action, or other action involving the records has been initiated before the expiration of the one-year period, in which case the records must be retained until the completion of the action and resolution of all issues, or until the end of the regular one-year period, whichever is later.

3-030.03 Records of receipt of radioactive material which must be maintained pursuant to 180 NAC 3-030.01 will be maintained as long as the licensee retains possession of the radioactive material and for five years following transfer, or disposition of the radioactive material and;

1. Records of transfer of radioactive material must be maintained by the licensee who transferred the material until the Agency authorizes their disposition and;
2. Records of disposal of radioactive material must be maintained in accordance with 180 NAC 452.
3. If radioactive material is combined or mixed with other licensed material and subsequently treated in a manner which makes direct correlation of a receipt record with a transfer, export, or disposition record impossible, evaluative techniques such as first-in-first-out may be used for purposes of the records retention requirements of 180 NAC 3-030.

3-030.04 Records which must be maintained pursuant to 180 NAC 3-030.01 may be the original or reproduced copy of microform if such reproduced copy or microform is duly authenticated by authorized personnel and the microform is capable of producing a clear and

legible copy after storage for the period specified by Agency regulations. The record may also be stored in electronic media with the capability for producing legible, accurate and complete record during the required retention period. Records such as letters, drawings, specifications, must include all pertinent information such as stamps, initials, and signatures. The licensee must maintain adequate safeguards against tampering with and loss of records.

3-030.05 If there is a conflict between the Agency's regulations in this Chapter, license condition, or other written Agency approval or authorization pertaining to the retention period for the same type of record, the retention period specified in 180 NAC 3-030 for such records shall apply unless the Agency pursuant to 180 NAC 1-003.01 has granted a specific exemption from the record retention requirements specified in 180 NAC 3-030.05.

3-030.06 Prior to license termination, each licensee authorized to possess radioactive material with a half-life greater than 120 days, in an unsealed form, must forward the following records to the Agency:

1. Records of disposal of licensed material made under 180 NAC 4-040, 180 NAC 4-041, 180 NAC 4-042 and 180 NAC 4-043; and
2. Records required by 180 NAC 4-048.02, item 4.

3-030.07 If licensed activities are transferred or assigned in accordance with 180 NAC 3-017.02, each licensee authorized to possess radioactive material with a half-life greater than 120 days, in an unsealed form, must transfer the following records to the new licensee and the new licensee will be responsible for maintaining these records until the license is terminated:

1. Records of disposal of licensed material made under, 180 NAC 3-038, 3-039, 3-040, 3-041 and
2. Records required by 180 NAC 4-048.02, item 4.

3-030.08 Prior to license termination, each licensee must forward the records required by 180 NAC 3-018.07 to the Agency.

EXEMPT CONCENTRATIONS:

Element (atomic number)	Isotope	Column I Gas Concentration μCi/ml*	Column II Liquid and Solid Concentration μCi/ml**
Antimony (51)	Sb-122		3E-4
	Sb-124		2E-4
	Sb-125		1E-3
Argon (18)	Ar-37	1E-3	
	Ar-41	4E-7	
Arsenic (33)	As-73		5E-3
	As-74		5E-4
	As-76		2E-4
	As-77		8E-4
Barium (56)	Ba-131		2E-3
	Ba-140		3E-4
Beryllium (4)	Be-7		2E-2
Bismuth (83)	Bi-206		4E-4
Bromine (35)	Br-82	4E-7	3E-3
Cadmium (48)	Cd-109		2E-3
	Cd-115m		3E-4
	Cd-115		3E-4
Calcium (20)	Ca-45		9E-5
	Ca-47		5E-4
Carbon (6)	C-14	1E-6	8E-3
Cerium (58)	Ce-141		9E-4
	Ce-143		4E-4
	Ce-144		1E-4
Cesium (55)	Cs-131		2E-2
	Cs-134m		6E-2
	Cs-134		9E-5
Chlorine (17)	Cl-38	9E-7	4E-3
Chromium (24)	Cr-51		2E-2

Appendix 3-A

Element (atomic number)	Isotope	Column I Gas Concentration μCi/ml*	Column II Liquid and Solid Concentration μCi/ml**
Cobalt (27)	Co-57		5E-3
	Co-58		1E-3
	Co-60		5E-4
Copper (29)	Cu-64		3E-3
Dysprosium (66)	Dy-165		4E-3
	Dy-166		4E-4
Erbium (68)	Er-169		9E-4
	Er-171		1E-3
Europium (63)	Eu-152 (T/2=9.2hrs)		6E-4
	Eu-155		2E-3
Fluorine (9)	F-18	2E-6	8E-3
Gadolinium (64)	Gd-153		2E-3
	Gd-159		8E-4
Gallium (31)	Ga-72		4E-4
Germanium (32)	Ge-71		2E-2
Gold (79)	Au-196		2E-3
	Au-198		5E-4
	Au-199		2E-3
Hafnium (72)	Hf-181		7E-4
Hydrogen (1)	H-3	5E-6	3E-2
Indium (49)	In-113m		1E-2
	In-114m		2E-4
Iodine (53)	I-126	3E-9	2E-5
	I-131	3E-9	2E-5
	I-132	8E-8	6E-4
	I-133	1E-8	7E-5
	I-134	2E-7	1E-3
Iridium (77)	Ir-190		2E-3
	Ir-192		4E-4
	Ir-194		3E-4
Iron (26)	Fe-55		8E-3

Appendix 3-A

Element (atomic number)	Isotope	Column I Gas Concentration μCi/ml*	Column II Liquid and Solid Concentration μCi/ml**
	Fe-59		6E-4
Krypton (36)	Kr-85m	1E-6	
	Kr-85	3E-6	
Lanthanum (57)	La-140		2E-4
Lead (82)	Pb-203		4E-3
Lutetium (71)	Lu-177		1E-3
Manganese (25)	Mn-52		3E-4
	Mn-54		1E-3
	Mn-56		1E-3
Mercury (80)	Hg-197m		2E-3
	Hg-197		3E-3
	Hg-203		2E-4
Molybdenum (42)	Mo-99		2E-3
Neodymium (60)	Nd-147		6E-4
	Nd-149		3E-3
Nickel (28)	Ni-65		1E-3
Niobium (Columbium)(41)	Nb-95		1E-3
	Nb-97		9E-3
Osmium (76)	Os-185		7E-4
	Os-191m		3E-2
	Os-191		2E-3
	Os-193		6E-4
Palladium (46)	Pd-103		3E-3
	Pd-109		9E-4
Phosphorus (15)	P-32		2E-4
Platinum (78)	Pt-191		1E-3
	Pt-193m		1E-2
	Pt-197m		1E-2
	Pt-197		1E-3
Potassium (19)	K-42		3E-3
Praseodymium (59)	Pr-142		3E-4

Appendix 3-A

Element (atomic number)	Isotope	Column I Gas Concentration μCi/ml*	Column II Liquid and Solid Concentration μCi/ml**
	Pr-143		5E-4
Promethium (61)	Pm-147		2E-3
	Pm-149		4E-4
Rhenium (75)	Re-183		6E-3
	Re-186		9E-4
	Re-188		6E-4
Rhodium (45)	Rh-103m		1E-1
	Rh-105		1E-3
Rubidium (37)	Rb-86		7E-4
Ruthenium (44)	Ru-97		4E-3
	Ru-103		8E-4
	Ru-105		1E-3
	Ru-106		1E-4
Samarium (62)	Sm-153		8E-4
Scandium (21)	Sc-46		4E-4
	Sc-47		9E-4
	Sc-48		3E-4
Selenium (34)	Se-75		3E-3
Silicon (14)	Si-31		9E-3
Silver (47)	Ag-105		1E-3
	Ag-110m		3E-4
	Ag-111		4E-4
Sodium (11)	Na-24		2E-3
Strontium (38)	Sr-85		1E-3
	Sr-89		1E-4
	Sr-91		7E-4
	Sr-92		7E-4
Sulfur (16)	S-35	9E-8	6E-4
Tantalum (73)	Ta-182		4E-4
Technetium (43)	Tc-96m		1E-1
	Tc-96		1E-3

Appendix 3-A

Element (atomic number)	Isotope	Column I Gas Concentration μCi/ml*	Column II Liquid and Solid Concentration μCi/ml**
Tellurium (52)	Te-125m		2E-3
	Te-127m		6E-4
	Te-127		3E-3
	Te-129m		3E-4
	Te-131m		6E-4
	Te-132		3E-4
Terbium (65)	Tb-160		4E-4
Thallium (81)	Tl-200		4E-3
	Tl-201		3E-3
	Tl-202		1E-3
	Tl-204		1E-3
Thulium (69)	Tm-170		5E-4
	Tm-171		5E-3
Tin (50)	Sn-113		9E-4
	Sn-125		2E-4
Tungsten (Wolfram)(74)	W-181		4E-3
	W-187		7E-4
Vanadium (23)	V-48		3E-4
Xenon (54)	Xe-131m	4E-6	
	Xe-133	3E-6	
	Xe-135	1E-6	
Ytterbium (70)	Yb-175		1E-3
Yttrium (39)	Y-90		2E-4
	Y-91m		3E-2
	Y-91		3E-4
	Y-92		6E-4
	Y-93		3E-4
Zinc (30)	Zn-65		1E-3
	Zn-69m		7E-4
	Zn-69		2E-2
Zirconium (40)	Zr-95		6E-4

Appendix 3-A

Element (atomic number)	Isotope	Column I Gas Concentration μCi/ml*	Column II Liquid and Solid Concentration μCi/ml**
	Zr-97		2E-4
Beta and/or gamma emitting radioactive material not listed above with half-life less than 3 years		1E-10	1E-6

*Values are given in Column I only for those materials normally used as gases.

**μCi/gm for solids.

NOTE 1: Many radioisotopes disintegrate into isotopes which are also radioactive. In expressing the concentrations in 180 NAC 3, Appendix 003-A the activity stated is that of the parent isotope and takes into account the daughters.

NOTE 2: For purposes of 180 NAC 3-004 where there is involved a combination of isotopes, the limit for the combination should be derived as follows: Determine for each isotope in the product the ratio between the concentration present in the product and the exempt concentration established in Appendix 003-A for the specific isotope when not in combination. The sum of such ratios may not exceed "1" (i.e., unity).

EXAMPLE:

$$\frac{\text{Concentration of Isotope A in Product}}{\text{Exempt concentration of Isotope A}} + \frac{\text{Concentration of Isotope B in Product}}{\text{Exempt concentration of Isotope B}} = \leq 1$$

NOTE 3: To convert μCi/ml to SI units of megabecquerels per liter multiply the above value by 37.

EXAMPLE: Zirconium (40) Zr-97 2E-4 μCi/ml multiplied by 37 is equivalent to 74E+4 MBq /l)

APPENDIX 3-B

Radioactive Material	Microcuries

EXEMPT QUANTITIES

Antimony-122 (Sb 122)	100
Antimony-124 (Sb 124)	10
Antimony-125 (Sb 125)	10
Arsenic-73 (As 73)	100
Arsenic-74 (As 74)	10
Arsenic-76 (As 76)	10
Arsenic-77 (As 77)	100
Barium-131 (Ba 131)	10
Barium-133 (Ba 133)	10
Barium-140 (Ba 140)	10
Bismuth-210 (Bi 210)	1
Bromine-82 (Br 82)	10
Cadmium-109 (Cd 109)	10
Cadmium-115m (Cd 115m)	10
Cadmium-115 (Cd 115)	100
Calcium-45 (Ca 45)	10
Calcium-47 (Ca 47)	10
Carbon-14 (C 14)	100
Cerium-141 (Ce 141)	100
Cerium-143 (Ce 143)	100
Cerium-144 (Ce 144)	1
Cesium-129 (Cs 129)	100
Cesium-131 (Cs 131)	1,000
Cesium-134m (Cs 134m)	100
Cesium-134 (Cs 134)	1
Cesium-135 (Cs 135)	10
Cesium-136 (Cs 136)	10
Cesium-137 (Cs 137)	10
Chlorine-36 (Cl 36)	10
Chlorine-38 (Cl 38)	10
Chromium-51 (Cr 51)	1,000
Cobalt-57 (Co 57)	100
Cobalt-58m (Co 58m)	10
Cobalt-58 (Co 58)	10
Cobalt-60 (Co 60)	1
Copper-64 (Cu 64)	100
Dysprosium-165 (Dy 165)	10
Dysprosium-166 (Dy 166)	100
Erbium-169 (Er 169)	100
Erbium-171 (Er 171)	100

APPENDIX 3-B

Radioactive Material	Microcuries
Europium-152 (Eu 152) 9.2h	100
Europium-152 (Eu 152) 13 yr	1
Europium-154 (Eu 154)	1
Europium-155 (Eu 155)	10
Fluorine-18 (F 18)	1,000
Gadolinium-153 (Gd 153)	10
Gadolinium-159 (Gd 159)	100
Gallium-67 (Ga 67)	100
Gallium-72 (Ga 72)	10
Germanium-71 (Ge 71)	100
Gold-198 (Au 198)	100
Gold-199 (Au 199)	100
Hafnium-181 (Hf 181)	10
Holmium-166 (Ho 166)	100
Hydrogen-3 (H 3)	1,000
Indium-111 (In 111)	100
Indium-113m (In 113m)	100
Indium-114m (In 114m)	10
Indium-115m (In 115m)	100
Indium-115 (In 115)	10
Iodine-123 (I 123)	100
Iodine-125 (I 125)	1
Iodine-126 (I 126)	1
Iodine-129 (I 129)	0.1
Iodine-131 (I 131)	1
Iodine-132 (I 132)	10
Iodine-133 (I 133)	1
Iodine-134 (I 134)	10
Iodine-135 (I 135)	10
Iridium-192 (Ir 192)	10
Iridium-194 (Ir 194)	100
Iron-52 (Fe 52)	10
Iron-55 (Fe 55)	100
Iron-59 (Fe 59)	10
Krypton-85 (Kr 85)	100
Krypton-87 (Kr 87)	10
Lanthanum-140 (La 140)	10
Lutetium-177 (Lu 177)	100
Manganese-52 (Mn 52)	10
Manganese-54 (Mn 54)	10
Manganese-56 (Mn 56)	10
Mercury-197m (Hg 197m)	100
Mercury-197 (Hg 197)	100
Mercury-203 (Hg 203)	10

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Radioactive Material	Microcuries
Molybdenum-99 (Mo 99)	100
Neodymium-147 (Nd 147)	100
Neodymium-149 (Nd 149)	100
Nickel-59 (Ni 59)	100
Nickel-63 (Ni 63)	10
Nickel-65 (Ni 65)	100
Niobium-93m (Nb 93m)	10
Niobium-95 (Nb 95)	10
Niobium-97 (Nb 97)	10
Osmium-185 (Os 185)	10
Osmium-191m (Os 191m)	100
Osmium-191 (Os 191)	100
Osmium-193 (Os 193)	100
Palladium-103 (Pd 103)	100
Palladium-109 (Pd 109)	100
Phosphorus-32 (P 32)	10
Platinum-191 (Pt 191)	100
Platinum-193m (Pt 193m)	100
Platinum-193 (Pt 193)	100
Platinum-197m (Pt 197m)	100
Platinum-197 (Pt 197)	100
Polonium-210 (Po 210)	0.1
Potassium-42 (K 42)	10
Potassium-43 (K 43)	10
Praseodymium-142 (Pr 142)	100
Praseodymium-143 (Pr 143)	100
Promethium-147 (Pm 147)	10
Promethium-149 (Pm 149)	10
Rhenium-186 (Re 186)	100
Rhenium-188 (Re 188)	100
Rhodium-103m (Rh 103m)	100
Rhodium-105 (Rh 105)	100
Rubidium-81 (Rb 81)	10
Rubidium-86 (Rb 86)	10
Rubidium-87 (Rb 87)	10
Ruthenium-97 (Ru 97)	100
Ruthenium-103 (Ru 103)	10
Ruthenium-105 (Ru 105)	10
Ruthenium-106 (Ru 106)	1
Samarium-151 (Sm 151)	10
Samarium-153 (Sm 153)	100
Scandium-46 (Sc 46)	10
Scandium-47 (Sc 47)	100
Scandium-48 (Sc 48)	10

APPENDIX 3-B

Radioactive Material	Microcuries
Selenium-75 (Se 75)	10
Silicon-31 (Si 31)	100
Silver-105 (Ag 105)	10
Silver-110m (Ag 110m)	1
Silver-111 (Ag 111)	100
Sodium-22 (Na 22)	10
Sodium-24 (Na 24)	10
Strontium-85 (Sr 85)	10
Strontium-89 (Sr 89)	1
Strontium-90 (Sr 90)	0.1
Strontium-91 (Sr 91)	10
Strontium-92 (Sr 92)	10
Sulphur-35 (S 35)	100
Tantalum-182 (Ta 182)	10
Technetium-96 (Tc 96)	10
Technetium-97m (Tc 97m)	100
Technetium-97 (Tc 97)	100
Technetium-99m (Tc 99m)	100
Technetium-99 (Tc 99)	10
Tellurium-125m (Te 125m)	10
Tellurium-127m (Te 127m)	10
Tellurium-127 (Te 127)	100
Tellurium-129m (Te 129m)	10
Tellurium-129 (Te 129)	100
Tellurium-131m (Te 131m)	10
Tellurium-132 (Te 132)	10
Terbium-160 (Tb 160)	10
Thallium-200 (Tl 200)	100
Thallium-201 (Tl 201)	100
Thallium-202 (Tl 202)	100
Thallium-204 (Tl 204)	10
Thulium-170 (Tm 170)	10
Thulium-171 (Tm 171)	10
Tin-113 (Sn 113)	10
Tin-125 (Sn 125)	10
Tungsten-181 (W 181)	10
Tungsten-185 (W 185)	10
Tungsten-187 (W 187)	100
Vanadium-48 (V 48)	10
Xenon-131m (Xe 131m)	1,000
Xenon-133 (Xe 133)	100
Xenon-135 (Xe 135)	100
Ytterbium-175 (Yb 175)	100
Yttrium-87 (Y 87)	10

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Radioactive Material	Microcuries
Yttrium-90 (Y 90)	10
Yttrium-91 (Y 91)	10
Yttrium-92 (Y 92)	100
Yttrium-93 (Y 93)	100
Zinc-65 (Zn 65)	10
Zinc-69m (Zn 69m)	100
Zinc-69 (Zn 69)	1,000
Zirconium-93 (Zr 93)	10
Zirconium-95 (Zr 95)	10
Zirconium-97 (Zr 97)	10
Any radioactive material not listed above other than alpha emitting radioactive material	0.1

NOTE: To convert microcuries (μCi) to SI units of kilobecquerels (kBq), multiply the above values by 37.

EXAMPLE: Zirconium-97 (10 μCi multiplied by 37 is equivalent to 370 kBq).

APPENDIX 3-C

LIMITS FOR BROAD LICENSES 180 NAC 3-013:

Radioactive Material	Col. I curies	Col. II curies
Antimony-122	1	0.01
Antimony-124	1	0.01
Antimony-125	1	0.01
Arsenic-73	10	0.1
Arsenic-74	1	0.01
Arsenic-76	1	0.01
Arsenic-77	10	0.1
Barium-131	10	0.1
Barium-140	1	0.01
Beryllium-7	10	0.1
Bismuth-210	0.1	0.001
Bromine-82	10	0.1
Cadmium-109	1	0.01
Cadmium-115m	1	0.01
Cadmium-115	10	0.1
Calcium-45	1	0.01
Calcium-47	10	0.1
Carbon-14	100	1.0
Cerium-141	10	0.1
Cerium-143	10	0.1
Cerium-144	0.1	0.001
Cesium-131	100	1.0
Cesium-134m	100	1.0
Cesium-134	0.1	0.001
Cesium-135	1	0.01
Cesium-136	10	0.1
Cesium-137	0.1	0.001
Chlorine-36	1	0.01
Chlorine-38	100	1.0
Chromium-51	100	1.0
Cobalt-57	10	0.1
Cobalt-58m	100	1.0
Cobalt-58	1	0.01
Cobalt-60	0.1	0.001
Copper-64	10	0.1
Dysprosium-165	100	1.0
Dysprosium-166	10	0.1
Erbium-169	10	0.1
Erbium-171	10	0.1
Europium-152 (9.2h)	10	0.1
Europium-152 (13 y)	0.1	0.001

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Radioactive Material	Col. I curies	Col. II curies
Europium-154	0.1	0.001
Europium-155	1	0.01
Fluorine-18	100	1.0
Gadolinium-153	1	0.01
Gadolinium-159	10	0.1
Gallium-72	10	0.1
Germanium-71	100	1.0
Gold-198	10	0.1
Gold-199	10	0.1
Hafnium-181	1	0.01
Holmium-166	10	0.1
Hydrogen-3	100	1.0
Indium-113m	100	1.0
Indium-114m	1	0.01
Indium-115m	100	1.0
Indium-115	1	0.01
Iodine-125	0.1	0.001
Iodine-126	0.1	0.001
Iodine-129	0.1	0.001
Iodine-131	0.1	0.001
Iodine-132	10	0.1
Iodine-133	1	0.01
Iodine-134	10	0.1
Iodine-135	1	0.01
Iridium-192	1	0.01
Iridium-194	10	0.1
Iron-55	10	0.1
Iron-59	1	0.01
Krypton-85	100	1.0
Krypton-87	10	0.1
Lanthanum-140	1	0.01
Lutetium-177	10	0.1
Manganese-52	1	0.01
Manganese-54	1	0.01
Manganese-56	10	0.1
Mercury-197m	10	0.1
Mercury-197	10	0.1
Mercury-203	1	0.01
Molybdenum-99	10	0.1
Neodymium-147	10	0.1
Neodymium-149	10	0.1
Nickel-59	10	0.1
Nickel-63	1	0.01
Nickel-65	10	0.1

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Radioactive Material	Col. I curies	Col. II curies
Niobium-93m	1	0.01
Niobium-95	1	0.01
Niobium-97	100	1.0
Osmium-185	1	0.01
Osmium-191m	100	1.0
Osmium-191	10	0.1
Osmium-193	10	0.1
Palladium-103	10	0.1
Palladium-109	10	0.1
Phosphorus-32	1	0.01
Platinum-191	10	0.1
Platinum-193m	100	1.0
Platinum-193	10	0.1
Platinum-197m	100	1.0
Platinum-197	10	0.1
Polonium-210	0.01	0.0001
Potassium-42	1	0.01
Praseodymium-142	10	0.1
Praseodymium-143	10	0.1
Promethium-147	1	0.01
Promethium-149	10	0.1
Radium-226	0.01	0.0001
Rhenium-186	10	0.1
Rhenium-188	10	0.1
Rhodium-103m	1,000	10.0
Rhodium-105	10	0.1
Rubidium-86	1	0.01
Rubidium-87	1	0.01
Ruthenium-97	100	1.0
Ruthenium-103	1	0.01
Ruthenium-105	10	0.1
Ruthenium-106	0.1	0.001
Samarium-151	1	0.01
Samarium-153	10	0.1
Scandium-46	1	0.01
Scandium-47	10	0.1
Scandium-48	1	0.01
Selenium-75	1	0.01
Silicon-31	10	0.1
Silver-105	1	0.01
Silver-110m	0.1	0.001
Silver-111	10	0.1
Sodium-22	0.1	0.001
Sodium-24	1	0.01

APPENDIX 3-C

Radioactive Material	Col. I curies	Col. II curies
Strontium-85m	1,000	10.0
Strontium-85	1	0.01
Strontium-89	1	0.01
Strontium-90	0.01	0.0001
Strontium-91	10	0.1
Strontium-92	10	0.1
Sulphur-35	10	0.1
Tantalum-182	1	0.01
Technetium-96	10	0.1
Technetium-97m	10	0.1
Technetium-97	10	0.1
Technetium-99m	100	1.0
Technetium-99	1	0.01
Tellurium-125m	1	0.01
Tellurium-127m	1	0.01
Tellurium-127	10	0.1
Tellurium-129m	1	0.01
Tellurium-129	100	1.0
Tellurium-131m	10	0.1
Tellurium-132	1	0.01
Terbium-160	1	0.01
Thallium-200	10	0.1
Thallium-201	10	0.1
Thallium-202	10	0.1
Thallium-204	1	0.01
Thulium-170	1	0.01
Thulium-171	1	0.01
Tin-113	1	0.01
Tin-125	1	0.01
Tungsten-181	1	0.01
Tungsten-185	1	0.01
Tungsten-187	10	0.1
Vanadium-48	1	0.01
Xenon-131m	1,000	10.0
Xenon-133	100	1.0
Xenon-135	100	1.0
Ytterbium-175	10	0.1
Yttrium-90	1	0.01
Yttrium-91	1	0.01
Yttrium-92	10	0.1
Yttrium-93	1	0.01
Zinc-65	1	0.01
Zinc-69m	10	0.1
Zinc-69	100	1.0

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Zirconium-93	1	0.01
Zirconium-95	1	0.01
Zirconium-97	1	0.01
Any radioactive material other than source material, special nuclear material, or alpha emitting radioactive material not listed above.	0.1	0.001

NOTE: To convert curies (Ci) to SI units of gigabecquerels (GBq) multiply the above values by 37

EXAMPLE: Zirconium-97 (Col. II) (0.01 Ci multiplied by 37 is equivalent to 0.37 GBq)

APPENDIX 3-D

Criteria Relating to Use of Financial Tests and Self-Guarantees for Providing Reasonable Assurance of Funds for Decommissioning

1. Introduction

An applicant or licensee may provide reasonable assurance of the availability of funds for decommissioning based on furnishing its own guarantee that funds will be available for decommissioning costs and on a demonstration that the company passes the financial test of § 2 of this Appendix. The terms of this self-guarantee are in § 3 of this Appendix. This appendix establishes criteria for passing the financial test for the self-guarantee and establishes the terms for obtaining a self-guarantee.

2. Financial Test

A. To pass the financial test, a company must meet all of the following criteria:

(1) Tangible net worth of at least 10 times the total current decommissioning cost estimate (or the current amount if certification is used) for all decommissioning activities for which the company is responsible as self-guaranteeing licensee and a parent-guarantor.

(2) Assets located in the United States amounting to at least 90%t of total assets or at least 10 times the total current decommissioning cost estimate (or the current amount if certification is used) for all decommissioning activities for which the company is responsible as self-guaranteeing licensee and a parent-guarantor.

(3) A current rating for its most recent bond issuance of AAA, AA, or A as issued by Standard and Poor's (S&P) or Aaa, Aa, or A as issued by Moody's.

B. To pass the financial test, a company must meet all of the following additional requirements:

(1) The company must have at least one class of equity securities registered under the Securities Exchange Act of 1934.

(2) The company's independent certified public accountant must have compared the data used by the company in the financial test, which is derived from the independently audited, year end financial statements for the latest fiscal year, with the amounts in such financial statement. In connection with that procedure, the licensee must inform the Agency within 90 days of any matters coming to the attention of the auditor that cause the auditor to believe that the data specified in the financial test should be adjusted and that the company no longer passes the test.

(3) After the initial financial test, the company must repeat the passage of the test within 90 days after the close of each succeeding fiscal year.

C. If the company no longer meets the requirements of § 2.A. of this Appendix, the licensee must send immediate notice to the Agency of its intent to establish alternate financial assurance as specified in the Agency’s regulations within 120 days of such notice.

3. Company Self-Guarantee
The terms of a self-guarantee which an applicant or licensee furnishes must provide that:

APPENDIX 3-D

A. The guarantee will remain in force unless the licensee sends notice of cancellation by certified mail to the Agency. Cancellation may not occur, however during the 120 days beginning on the date of receipt of the notice of cancellation by the Agency, as evidenced by the return receipt.

B. The licensee must provide alternative financial assurance as specified in the Agency's regulations within 90 days following receipt by the Agency of a notice of cancellation of the guarantee.

C. The guarantee and financial test provisions must remain in effect until the Agency has terminated the license or until another financial assurance method acceptable to the Agency has been put in effect by the licensee.

D. The licensee will promptly forward to the Agency and the licensee's independent auditor all reports covering the latest fiscal year filed by the licensee with the Securities and Exchange Commission pursuant to the requirements of § 13 of the Securities and Exchange Act of 1934.

E. If, at any time, the licensee's most recent bond issuance ceases to be rated in any category of "A" or above by either Standard and Poors or Moody's, the licensee will provide notice in writing of such fact to the Agency within 20 days after publication of the change by the rating service. If the licensee's most recent bond issuance ceases to be rated in any category of "A" or above by both Standard and Poors or Moody's, the licensee no longer meets the requirements of § 2.A. of this Appendix.

F. The applicant or licensee must provide to the Agency a written guarantee (a written commitment by a corporate officer) which states that the licensee will fund and carry out the required decommissioning activities or, upon issuance of an order by the Agency, the licensee will set up and fund a trust in the amount of the current cost estimate for decommissioning.

APPENDIX 3-E

Quantities of Radioactive Materials Requiring Consideration of the Need for an Emergency Plan for Responding to a Release.

Radioactive material[1]	Release fraction	Quantity (curies)
Actinium-228	0.001	4,000
Americium-241	0.001	2
Americium-242	0.001	2
Americium-243	0.001	2
Antimony-124	0.01	4,000
Antimony-126	0.01	6,000
Barium-133	0.01	10,000
Barium-140	0.01	30,000
Bismuth-207	0.01	5,000
Bismuth-210	0.01	600
Cadmium-109	0.01	1,000
Cadmium-113	0.01	80
Calcium-45	0.01	20,000
Californium-252	0.00	19 (20 mg)
Carbon-14 (Non CO)	0.01	50,000
Cerium-141	0.01	10,000
Cerium-144	0.01	300
Cesium-134	0.01	2,000
Cesium-137	0.01	3,000
Chlorine-36	0.5	100
Chromium-51	0.01	300,000
Cobalt-60	0.001	5,000
Copper-64	0.01	200,000
Curium-242	0.001	60
Curium-243	0.001	3
Curium-244	0.001	4
Curium-245	0.001	2
Europium-152	0.01	500
Europium-154	0.01	400
Europium-155	0.01	3,000
Germanium-68	0.01	2,000
Gadolinium-153	0.01	5,000
Gold-198	0.01	30,000
Hafnium-172	0.01	400
Hafnium-181	0.01	7,000
Holmium-166m	0.01	100
Hydrogen-3	0.5	20,000
Iodine-125	0.5	10
Iodine-131	0.5	10

APPENDIX 3-E

Radioactive material[1]	Release fraction	Quantity (curies)
Indium-114m	0.01	1,000
Iridium-192	0.001	40,000
Iron-55	0.01	40,000
Iron-59	0.01	7,000
Krypton-85	1.0	6,000,000
Lead-210	0.01	8
Manganese-56	0.01	60,000
Mercury-203	0.01	10,000
Molybdenum-99	0.01	30,000
Neptunium-237	0.001	2
Nickel-63	0.01	20,000
Niobium-94	0.01	300
Phosphorus-32	0.5	100
Phosphorus-33	0.5	1,000
Polonium-210	0.01	10
Potassium-42	0.01	9,000
Promethium-145	0.01	4,000
Promethium-147	0.01	4,000
Ruthenium-106	0.01	200
Samarium-151	0.01	4,000
Scandium-46	0.01	3,000
Selenium-75	0.01	10,000
Silver-110m	0.01	1,000
Sodium-22	0.01	9,000
Sodium-24	0.01	10,000
Strontium-89	0.01	3,000
Strontium-90	0.01	90
Sulfur-35	0.5	900
Technetium-99	0.01	10,000
Technetium-99m	0.01	400,000
Tellurium-127m	0.01	5,000
Tellurium-129m	0.01	5,000
Terbium-160	0.01	4,000
Thulium-170	0.01	4,000
Tin-113	0.01	10,000
Tin-123	0.01	3,000
Tin-126	0.01	1,000
Titanium-44	0.01	100
Vanadium-48	0.01	7,000
Xenon-133	1.0	900,000
Yttrium-91	0.01	2,000
Zinc-65	0.01	5,000
Zirconium-93	0.01	400
Zirconium-95	0.01	5,000
Any other beta-gamma emitter	0.01	10,000

APPENDIX 3-E

Radioactive material[1]	Release fraction	Quantity (curies)
Mixed fission products	0.01	1,000
Mixed Corrosion products	0.01	10,000
Contaminated equipment beta-gamma	0.001	10,000
Irradiated material, any form other than solid noncombustible	0.01	1,000
Irradiated material, solid noncombustible	0.001	10,000
Mixed radioactive waste, beta-gamma	0.01	1,000
Packaged mixed waste, beta-gamma[2]	0.001	10,000
Any other alpha emitter	0.001	2
Contaminated equipment, alpha	0.0001	20
Packaged waste, alpha[2]	0.0001	20
Combinations of radio-active materials listed above[1]	-----	-----

[1]For combinations of radioactive materials, consideration of the need for an emergency plan is required if the sum of the ratios of the quantity of each radioactive material authorized to the quantity listed for that material in 180 NAC 3, Appendix 003-E exceeds one.

[2]Waste packaged in Type B containers does not require an emergency plan.

NEBRASKA DEPARTMENT OF HEALTH AND HUMAN SERVICES REGULATION AND LICENSURE
DIVISION OF PUBLIC HEALTH ASSURANCE - RADIOACTIVE MATERIALS PROGRAM

APPLICATION FOR RADIOACTIVE MATERIAL LICENSE

INSTRUCTIONS - (Use additional sheets where necessary.)
New or Renewal Application - Complete Items 1. through 15.
Amendment to License - Complete Items1.a, 3., and 15. And indicate other changes as appropriate.
Retain one copy for your files and submit original application to: Department of Health and Human Services Regulation and Licensure, Division of Public Health Assurance, 301 Centennial Mall South, P.O. Box 95007, Lincoln, NE 68509-5007.
Upon approval of this application, the applicant will receive a Radioactive Material License, issued in accordance with the requirements contained in Title 180, Regulations for the Control of Radiation and the Nebraska Radiation Control Act.

1.a Legal Name and Street address of Applicant (Institution, Firm, Person, etc.)

Applicant Name: _____

Address: _____

_____

City, State Zip +4: _____

Telephone #: _____

FAX #: _____

EMail Address:

1.b Street address(es) at which Radioactive Material will be used. (If different than 1.a)

(1) Permanent Address: _____

_____

City, State Zip+4: _____

(2) Temporary Job Sites Throughout Nebraska? Yes No

2. Department to Use Radioactive Material

_____

Person to Contact:_____

Telephone #:_____

3. This is an application for:

New License

Amendment to License No._____

Renewal of License No._____

4. Individual User(s)

Individual users approved by the Licensee's radiation safety committee.

Individual users approved by the Licensee's radiation safety officer.

Individual users satisfy the requirements of 180 NAC 3-013

OR

Name and Title of individual(s) who will use or directly supervise use of, Radioactive Materials. Give training and experience in Items 7. And 8.

First Name + Middle Initial Last Name Title

5. Radiation Safety Officer (RSO)
(Name and Title of Individual designated as Radiation Safety Officer.

_____

Telephone #:_____

Attach documentation of his/her training and experience as in Items 7. and 8.

Agency Use Only

Date Received Stamp

6. Radioactive Material Data

Type B Broad Scope, 180 NAC 3-013.01, item 2

Type C Broad Scope, 180 NAC 3-013.01, item 3

Specific License, Radioactive Material Listed below:

6.a. Element and Mass Number	6.b. Chemical or Physical Form (Make and Model if sealed source)	6.c. Maximum Activity Requested (Expressed as Curies, Millicuries or Microcuries)	6.d. Use of Each Form (If sealed source, also give Make and Model Number of the storage and/or device in which sealed source will be stored and/or used)

7. Training of Individuals in Items 4. and 5.

Name of Individual:

	Formal Course Title	Location and Date(s) of Training	Clock Hours in Lecture or Laboratory
7.a. Radiation Physics and Instrumentation			
7.b. Radiation Protection			
7.c. Mathematics Pertaining to the Use and Measurement of Radioactivity			
7.d. Biological Effects of Radiation			

8. Experience with Radiation of Individuals in Items 4. and 5.

(Actual use of Radioisotopes or Equivalent Experience)

Name of Individual:

Isotope	Maximum Activity	Where Experience Was Gained	Months/Years	Type of Use

9. Radiation Detection Instruments

Type of Instrument	Manufacturer?s Name	Model Number	Number Available	Radiation Detected	Sensitivity Range

10. Calibration of Instruments Listed in Item 9.

a. Calibrated by Service Company	b. Calibrated by Applicant
Name and Address of Service Company and Frequency of Calibration	

11. Personnel Monitoring Devices

(Check and/or complete as appropriate)

Type	Supplier (Service Company)	Exchange Frequency
Film Badge TLD DOSL Other (Specify): _____		Monthly Quarterly Other (Specify): _____

Information to be Submitted on Additional Sheets

12. Facilities and Equipment

Describe laboratory facilities and remote handling equipment, storage containers, shielding, fume hoods, etc. Attach an explanatory sketch of the facility.

13. Radiation Protection Program

Describe the radiation protection program as appropriate for the material to be used, including: the duties and responsibilities of the Radiation Safety Officer (RSO); control measures; bioassay procedures (if needed); day-to-day general safety instructions to be followed; etc. If the application is for sealed sources also submit leak testing procedures, or if leak testing will be performed using a leak test kit, specify manufacturer and model number of the leak test kit.

14. Waste Disposal

If a commercial waste disposal service is employed, specify the name and address of the company. Otherwise, submit a detailed description of methods which will be used for disposing of radioactive wastes and estimates of the type and amount of activity involved. If the application is for sealed sources and devices and they will be returned to the manufacturer, so state.

15. CERTIFICATION
(This item must be completed by applicant.)

The applicant and any official executing this document on behalf of the applicant named in Item 1.a., certify that this application is prepared in conformity with the Nebraska Department of Health and Human Services Regulation and Licensure, Title 180, Regulations for the Control of Radiation and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

_____

Applicant Name From Item 1.a.

By: _____ *Date:* _____

Signature

_____

Print Name and Title of certifying official authorized to act on behalf of the applicant

NEBRASKA DEPARTMENT OF HEALTH AND HUMAN SERVICES REGULATION AND LICENSURE
DIVISION OF PUBLIC HEALTH ASSURANCE
RADIOACTIVE MATERIALS PROGRAM

APPLICATION FOR RADIOACTIVE MATERIAL LICENSE - Medical or Teletherapy

INSTRUCTIONS - (Use additional sheets where necessary.)
Medical Application - Complete Items 1. through 26.
Teletherapy Application - Complete Items 1. through 26, as applicable and Supplement C.
Retain one copy for your files and submit original application to: Department of Health and Human Services Regulation and Licensure, Division of Public Health Assurance, 301 Centennial Mall South, P.O. Box 95007, Lincoln, NE 68509-5007.
Upon approval of this application, the applicant will receive a Radioactive Material License, issued in accordance with the requirements contained in Title 180, Regulations for Control of Radiation and the Nebraska Radiation Control Act.

1.a Legal Name and Street address of Applicant (Institution, Firm, Hospital, Person, etc.)

Applicant Name: _____

Address: _____

_____

City, State Zip +4: _____

Telephone #: _____

FAX #: _____

eMail Address:

1.b Street address(es) at which Radioactive Material will be used. (If different than 1.a)

(1) Permanent Address: _____

_____

_____

City, State Zip+4: _____

(2) Temporary Job Sites Throughout Nebraska? Yes No

2. Person to Contact Regarding this Application

_____

Telephone #:_____

3. This is an application for:

New License

Amendment to License No._____

Renewal of License No._____

4. Individual User(s)
(Name and Title of individual(s) who will use or directly supervise use of, Radioactive Materials. Complete NRH-5A, Supplement A and B for each individual listed.)

First Name + Middle Initial	Last Name	Title

5. Radiation Safety Officer (RSO)
(Name and Title of Individual designated as Radiation Safety Officer.

_____

Telephone #:_____

Attach documentation of his/her training and experience as in NRH-5A, Supplement A.)

Agency Use Only

1.a Legal Name and Street address of Applicant (Institution, Firm, Hospital, Person, etc.)

	Date Received Stamp

6. Radioactive Material Data

6. Radioactive Material for Medical Use

Radioactive Material Listed In:	Items Desired (X)	Maximum Possession Limits (In millicuries)
Title 180 NAC 3-008.09 for Invitro Studies		
Title 180 NAC 7-034.01		
Title 180 NAC 7-036		
Title 180 NAC 7-040		
Title 180 NAC 7-044		
Title 180 NAC 7-046		
Additional Items		
Xenon-133 as gas or gas in saline for blood flow studies and pulmonary function studies		
Technetium-99m aerosolized DTPA for pulmonary function studies		
High dose rate remote afterloading brachytherapy device		

6.b. Radioactive Material for Uses not Listed in Item 6.a.

6.b.(1) Element and Mass Number	6.b.(2) Chemical or Physical Form (Make and Model if sealed source)	6.b.(3) Maximum Activity Requested (Expressed as Curies, Millicuries, or Microcuries)	6.b.(4) Use of Each Form (If sealed source, also give Make and Model Number of the storage and/or device in which sealed source will be stored and/or used)

Instructions for Items 7. Through 23.

For Items 7. through 23., check the appropriate box(es) and submit a detailed description of all the requested information. Begin each Item on a separate sheet, identifying the Item number and the date of the application in the lower right hand corner of each page.
If you indicate that you will follow an Appendix to the *Guide for Preparation of Applications for Medical Programs 7.0,* do not submit the pages, but specify the revision number and date of the *Guide*.
The Most current *Guide* is: Revision:_____ Date:_____

7. Radiation Safety Committee
Names and Specialities attached; **AND**
Duties as in Appendix B; **OR**
Equivalent Duties attached

8. Training and Experience
Supplements A and B attached for each individual user; **AND**
Supplement A attached for RSO

9. Instrumentation
Appendix C Form attached; **OR**
List by Name and Model Number

10. Calibration of Instruments
a. Survey Instruments
Appendix D Procedures followed; **OR**
Equivalent Procedures attached

AND

b. Dose Calibrator
Appendix D Procedures followed; **OR**
Equivalent Procedures attached

11. Facilities and Equipment
Description or diagram attached; **OR**
See Supplements C - Teletherapy Requirements

12. Personnel Training Program
Description of training attached

13. Procedures for Ordering and Receiving Radioactive Materials
Detailed Information Attached

14. Procedures for Safely Opening Packages Containing Radioactive Materials
Appendix F Procedures followed; **OR**
Equivalent Procedures attached

15. General Rules for the safe use of Radioactive Material
Appendix G Procedures followed; **OR**
Equivalent Procedures attached

16. Emergency Procedures
Appendix H Procedures followed; **OR**
Equivalent Procedures attached

17. Area Survey Procedures
Appendix I Procedures followed; **OR**
Equivalent Procedures attached

18. Waste Disposal
Appendix J Form attached; **OR**
Equivalent Information attached

19. Therapeutic Use of Radiopharmaceuticals
Appendix K Procedures followed; **OR**
Equivalent Procedures attached

20. Therapeutic Use of Sealed Sources
Detailed Information attached; **AND**
Appendix L Procedures followed; **OR**
Equivalent Procedures attached

21. Procedures and Precautions for use of Radioactive Gases (e.g., Xenon-133)
Detailed Information attached

22. Procedures and Precautions for Use of Radioactive Material in Animals
Detailed Information attached

23. Procedures and Precautions for Use of Radioactive Material Specified in Item 6.b.
Detailed Information attached

24. Personnel Monitoring Devices

(Check and/or complete as appropriate)

Type	Supplier/Service Company	Exchange Frequency
24.a. Whole Body Film Badge TLD DOSL Other: (Specify)		Monthly Quarterly Other: (Specify)
24.b. Finger Film Badge TLD Other: (Specify)		Monthly Quarterly Other: (Specify)
24.c. Wrist Film Badge TLD Other: (Specify)		Monthly Quarterly Other: (Specify)
24d. Other (Specify)		

26. CERTIFICATION
(This Item must be completed by applicant.)

The applicant and any official executing this document on behalf of the applicant named in Item 1.a., certify that this application is prepared in conformity with the Nebraska Department of Health and Human Services Regulation and Licensure, Title 180, Regulations for the Control of Radiation and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

_____

Applicant Name From Item 1.a.

By: _____ *Date:* _____

Signature

_____

Print Name and Title of certifying official authorized to act on behalf of the applicant

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APPLICATION FOR RADIOACTIVE MATERIAL LICENSE
Medical or Teletherapy

SUPPLEMENT A

Training and Experience
Authorized User or Radiation Safety Officer (RSO)

1. Name of Individual	**2. Physician who is licensed to dispense drugs in the practice of medicine in Nebraska?**
_____	
Authorized User	YES
Radiation Safety Officer	NO

3. Certification

3.a. Specialty Board	3.b. Category	3.c. Month and Year Certified

4. Training Received in Basic Radioisotope Handling Techniques

	Location and Dates of Training	Clock Hours in Lecture or Laboratory	Clock Hours of Supervised Laboratory Experience
4.a. Radiation Physics and Instrumentation			
4.b. Radiation Protection			
4.c. Mathematics Pertaining to the Use and Measurement of			
4.d. Biological Effects of Radiation			
4.e. Radiopharmaceutical Chemistry			

5. Experience with Radiation
(Actual Use of Radioisotopes or Equivalent Experience)

Isotope	Maximum Activity	Where Experience Was Gained	Months/Years	Type of Use

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APPLICATION FOR RADIOACTIVE MATERIAL LICENSE
Medical or Teletherapy

SUPPLEMENT B
Preceptor Statement

Supplement B must be completed by the applicant physician's preceptor. If more than one preceptor is necessary to document experience, obtain a separate statement from each.

1. Full Name and Street Address of Applicant Physician	
Full Name:	
Address:	
City, State Zip+4	

2. Clinical Training and Experience with Radiation
(Actual Use of Radioisotopes)

Isotope	Conditions Diagnosed or Treated	Number of Cases Involving Personal Participation[1]	Comments[2]
I-125 or I-131	Diagnosis of Thyroid Function		
	Determination of Blood and Blood Plasma Volume		
	Liver Function Studies		
	Fat Absorption Studies		
	Kidney Function Studies		
	In vitro Studies		
Other			
I-125	Detection of Thrombosis		
I-131	Thyroid Imaging		
P-32	Eye Tumor Localization		
Se-75	Pancreas Imaging		
Yb-169	Cisternography		
Xe-133	Blood Flow Studies and Pulmonary Function Studies		
Other			
Tc-99m	Brain Imaging		
	Cardiac Imaging		
	Thyroid Imaging		
	Salivary Gland Imaging		
	Blood Pool Imaging		
	Placenta Localization		
	Liver and Spleen Imaging		

1. Full Name and Street Address of Applicant Physician			
	Lung Imaging		
	Bone Imaging		

2. Clinical Training and Experience with Radiation

(Actual Use of Radioisotopes)

Other			
P-32 (Soluble)	Treatment of Polycythemia Vera, Leukemia, and Bone Metastases		
P-32 (Colloidal)	Intracavitary Treatment		
I-131	Diagnosis of Thyroid Function		
	Treatment of Hyperthyroidism		
Au-198	Intracavitary Treatment		
Co-60 or Cs-137	Interstitial Treatment		
	Intracavitary Treatment		
I-125 or Ir-192	Interstitial Treatment		
Ra-226	Intracavitary Treatment		
	Interstitial Treatment		
	Superficial Treatment		
Co-60 or Cs-137	Teletherapy Treatment		
Sr-90	Treatment of Eye Disease		
	Radiopharmaceutical Preparation		
Mo-99/Tc-99m	Generator		
Sn-113/In-113m	Generator		
Tc-99m	Reagent Kits		
X-Ray and Accelerator Therapy	Courses of Therapy Treatment		
Other			

[1] Key to column

Personal Participation should consist of:

1. Supervised examination of patients to determine the suitability for radioisotope diagnosis and/or treatment and recommendation for prescribed dosage.
2. Collaboration in dose calibration and actual administration of dose to the patient including calculation of the radiation dose, related measurements, and plotting of data.
3. Adequate period of training to enable physician to manage radioactive patients and follow patients through diagnosis and/or course of treatment.

[2] Additional information or comments may be submitted in duplicate on separate sheets.

3. Dates and Total Number of Hours Received in Clinical Radioisotope Training
(Submit in duplicate on separate sheets)

4. Training and Experience Obtained Under the Supervision of:

Supervisor's Name:

Institution Name:

Address

City, State Zip+4

Radioactive material License Number(s):

5. Preceptor's Verification

Preceptor's Name:_____
(Type or Print)

Preceptor?s Name:_____
(Type or Print)

_____
(Date)

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APPLICATION FOR RADIOACTIVE MATERIAL LICENSE
Medical or Teletherapy

SUPPLEMENT C

Requirements Specific to Teletherapy

1. Facilities and Equipment
Description and drawing of facilities attached; **AND**
Description of patient viewing and communicating systems attached; **AND**
Description of area safeguards attached

2. Beam Stops
Description of stops used to restrict beam orientation attached

3. Shielding Evaluation
Evaluation of proposed shielding attached

4. Operating and Emergency Procedures
Description of operating procedures attached; **AND**
Copy of emergency procedures attached

5. Instruction of Personnel
Training program and schedule in Appendix A followed; **OR**
Description of instruction program for employees attached

6. Leak Tests of Sealed Sources
Description of leak test procedures attached

7. Teletherapy Physicist (Use only if individual fails to meet 180 NAC 7-066.10 requirements)
Statement of qualifications of the physicist who will perform teletherapy calibrations attached.

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NEBRASKA DEPARTMENT OF HEALTH AND HUMAN SERVICES REGULATION AND LICENSURE
PUBLIC HEALTH ASSURANCE DIVISION

CERTIFICATE - USE OF DEPLETED URANIUM UNDER GENERAL LICENSE

180 NAC 3-007.04 establishes a general license authorizing a person to receive, acquire, possess, use, or transfer in accordance with the provisions of 180 NAC 3-007.04, items 2, 3, 4 and 5, depleted uranium contained in industrial products or devices for the purpose of providing a concentrated mass in a small volume of the product or device.

Possession of depleted uranium is not authorized under 180 NAC 3-007.04 until a licensee has filed Form NRH-11 and received from the Agency a validated copy of NRH-11 with a certification number.

CONDITIONS AND LIMITATIONS OF GENERAL LICENSE 3-007.04

3-007.04 Depleted Uranium In Industrial Products and Devices.

1. A general license is hereby issued to receive, acquire, possess, use, or transfer, in accordance with the provisions of 180 NAC 3-007.04 items 2. through 5., depleted uranium contained in industrial products or devices for the purpose of providing a concentrated mass in a small volume of the product or device.

2. The general license in 180 NAC 3-007.04, item 1 applies only to industrial products or devices which have been manufactured either in accordance with a specific license issued to the manufacturer of the products or devices pursuant to 180 NAC 3-014.13 or in accordance with a specific license issued to the manufacturer by the U.S. Nuclear Regulatory Commission or an Agreement State which authorizes manufacture of the products or devices for distribution to persons generally licensed by the U.S. Nuclear Regulatory Commission or an Agreement State.

3. Persons who receive, acquire, possess, or use depleted uranium pursuant to the general license established by 180 NAC 3-007.04, item 1 must:

   a. File Agency Form NRH-11 "Certificate - Use of Depleted Uranium Under General License," with the Agency. The form must be submitted within 30 days after the first receipt or acquisition of such depleted uranium. The registrant must furnish on Agency Form NRH-11 the following information and such other information as may be required by that form:

      (1) Name and address of the general licensee;
      (2) A statement that the general licensee has developed and will maintain procedures designed to establish physical control over the depleted uranium described in 180 NAC 3-007.04, item 1 and designed to prevent transfer of such depleted uranium in any form, including metal scrap, to persons not authorized to receive the depleted uranium; and
      (3) Name and/or title, address, and telephone number of the individual duly authorized to act for and on behalf of the general licensee in supervising the procedures identified in 180 NAC 3-007.04, item 3.a.(2).

   b. Report in writing to the Agency any changes in information furnished by him in Agency Form NRH-11 "Certificate - Use of Depleted Uranium Under General License." The report must be submitted within 30 days after the effective date of such change.

4. A person who receives, acquires, possesses, or uses depleted uranium pursuant to the general license established by 180 NAC 3-007.04, item 1 must:

   a. Not introduce such depleted uranium, in any form, into a chemical, physical, or metallurgical treatment or process, except a treatment or process for repair or restoration of any plating or other covering of the depleted uranium.

   b. Not abandon such depleted uranium.

   c. Transfer or dispose of such depleted uranium only by transfer in accordance with the provisions of 180 NAC 3-025. In the case where the transferee receives the depleted uranium pursuant to the general license established by 180 NAC 3-007.04, item 1., the transferor must furnish the transferee a copy of this regulation and a copy of Agency Form NRH-11. In the case where the transferee receives the depleted uranium pursuant to a general license contained in the U.S. Nuclear Regulatory Commission or Agreement State's regulation equivalent to 180 NAC 3-007.04, item 1., the transferor must furnish the transferee a copy of Title 180 and a copy of Agency Form NRH-11 accompanied by a note explaining that use of the product or device is regulated by the U.S. Nuclear Regulatory Commission or Agreement State under requirements substantially the same as those in Title 180.

   d. Within 30 days of any transfer, report in writing to the Agency the name and address of the person receiving the depleted uranium pursuant to such transfer.

5. Any person receiving, acquiring, possessing, using, or transferring depleted uranium pursuant to the general license established by 180 NAC 3-007.04, item 1 is exempt from the requirements of 180 NAC 4 and 180 NAC 10 with respect to the depleted uranium covered by that general license.

INSTRUCTIONS

Submit this form in duplicate to the Department of Health and Human Services Regulation and Licensure, Public Health Assurance Division, 301 Centennial Mall South, P.O. Box 95007, Lincoln, Nebraska 68509-5007.

A certification number will be assigned and a validated copy of NRH-11 will be returned.

(Print or Type)

1. Licensee Information

Legal Name: _____

Address: _____

_____

City, State and Zip+4 _____

Person Authorized to sign binding documents for the Licensee _____

2. I hereby apply for a Certificate number pursuant to 180 NAC 3-007.04 on behalf of the above Licensee.

3. Certification:

   I certify that:

   a. All information in this certificate is true and complete.

   b. I understand the Agency's regulations require that any change in the information furnished on this certificate be reported to the Department within 30 days from the date of such change.

   c. I have read and understand the provisions of 180 NAC 3-007.04 of the Agency's regulations, and I understand that I am required to comply with those provisions as to the depleted uranium which I receive, possess, use, or transfer under the general license.

_____

(Signature of Person listed in Item 1.) (Date)

4. To be completed by the Agency:

Certification Number_____Date_____

Radioactive Materials Program Manager_____

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NEBRASKA DEPARTMENT OF HEALTH AND HUMAN SERVICES REGULATION AND LICENSURE
PUBLIC HEALTH ASSURANCE DIVISION

CERTIFICATE - IN VITRO TESTING WITH RADIOACTIVE MATERIAL UNDER GENERAL LICENSE

180 NAC 3-008.09 establishes a general license authorizing physicians, veterinarians, clinical laboratories, and hospitals to possess certain small quantities of radioactive material for In Vitro clinical or laboratory tests not involving the internal or external administration of the radioactive material or the radiation therefrom to human beings or animals. Possession of radioactive material under 180 NAC 3-008.09 is not authorized until the physician, veterinarian, clinical laboratory, or hospital has filed Form NRH-17 and received from the Agency a validated copy of Form NRH-17 with a certification number.

CONDITIONS AND LIMITATIONS OF GENERAL LICENSE 180 NAC 3-008.09

3-008.09 General License for Use of Radioactive Material for Certain In Vitro Clinical or Laboratory Testing

1. A general license is hereby issued to any physician, veterinarian in the practice of veterinary medicine, clinical laboratory or hospital to receive, acquire, possess, transfer or use, for any of the following stated tests, in accordance with the provisions of 180 NAC 3-008.09, items 2. through 6., the following radioactive materials in prepackaged units for use in in vitro clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation therefrom, to human beings or animals:

    a. Iodine-125, iodine-131, selenium-75, cobalt-57, and carbon-14 in units not exceeding 370 kBq (10 microcuries) each.
    b. Hydrogen-3 (tritium), in units not exceeding 1.85 MBq (50 microcuries) each.
    c. Iron-59, in units not exceeding 740 kBq (20 microcuries) each.
    d. Mock Iodine-125 reference or calibration sources, in units not exceeding 1.85 kBq (0.05 microcurie) of iodine-129 and 1.85 Bq (0.005 microcurie) of americium-241 each.

2. No person receives, acquires, possesses, uses or transfers radioactive material pursuant to the general license established by 180 NAC 3-008.09, item 1. until he/she has filed Agency Form NRH-17, "Certificate - In Vitro Testing with Radioactive Material Under General License", with the Agency and received from the Agency a validated copy of Agency Form NRH-17 with certification number assigned. The physician, veterinarian, clinical laboratory or hospital must furnish on Agency Form NRH-17 the following information and such other information as may be required by that form:

    a. Name and address of the physician, veterinarian, clinical laboratory or hospital;
    b. The location of use; and
    c. A statement that the physician, veterinarian in the practice of veterinary medicine, clinical laboratory or hospital has appropriate radiation measuring instruments to carry out in vitro clinical or laboratory tests with radioactive material as authorized under the general license in 180 NAC 3-008.09, item 1. and that such tests will be performed only by personnel competent in the use of such instruments and in the handling of the radioactive material.

3. A person who receives, acquires, possesses or uses radioactive material pursuant to the general license established by 180 NAC 3-008.09, item 1. must comply with the following:

a. The general licensee must not possess at any one time, pursuant to the general license in 180 NAC 3-008.09, item 1. at any one location of storage or use a total amount of iodine-125, iodine-131, iron-59, cobalt-57 and/or selenium-75 in excess of 7.4 MBq (200 microcuries).

b. The general licensee must store the radioactive material, until used, in the original shipping container or in a container providing equivalent radiation protection.

c. The general licensee must use the radioactive material only for the uses authorized by 180 NAC 3-008.09, item 1.

d. The general licensee must not transfer the radioactive material to a person who is not authorized to receive it pursuant to a license issued by the Agency, the U.S. Nuclear Regulatory Commission, or any Agreement State, nor transfer the radioactive material in any manner other than in the unopened, labeled shipping container as received from the supplier.

e. The general licensee must dispose of the Mock Iodine-125 reference or calibration sources described in 180 NAC 3-008.09, item 1.d. as required by 180 NAC 4-039 and 4-04.

4. The general licensee must not receive, acquire, possess, or use radioactive material pursuant to 180 NAC 3-008.09, item 1.:

a. Except as prepackaged units which are labeled in accordance with the provisions of an applicable specific license issued pursuant to 180 NAC 3-014.08 or in accordance with the provisions of a specific license issued by the U.S. Nuclear Regulatory Commission, or any Agreement State which authorizes the manufacture and distribution of iodine-125, iodine-131, carbon-14, hydrogen-3 (tritium), iron-59, selenium-75, cobalt-57, or Mock Iodine-125 to persons generally licensed under 180 NAC 3-008.09 or its' equivalent, and

b. Unless the following statement, or substantially similar statement which contains the information called for in the following statement, appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure which accompanies the package:

This radioactive material shall be received, acquired, possessed, and used only by physicians, veterinarians in the practice of veterinary medicine, clinical laboratories or hospitals and only for in vitro clinical or laboratory tests not involving internal or external administration of the material, or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use, and transfer are subject to the regulations and a general license of the U.S. Nuclear Regulatory commission or of a State in which the Commission has entered into an agreement for the exercise of regulatory authority.

_____
Name of Manufacturer

5. The physician, veterinarian in the practice of veterinary medicine, clinical laboratory or hospital possessing or using radioactive material under the general license of 180 NAC 3-008.09, item 1. must report in writing to the Agency, any changes in the information furnished by him in the "Certificate - In Vitro Testing with Radioactive Material Under General License", Agency Form NRH-17. The report must be furnished within 30 days after the effective date of such change.

6. Any person using radioactive material pursuant to the general license of 180 NAC 3-008.09, item 1. is exempt from the requirements of 180 NAC 4 and 180 NAC 10 with respect to radioactive material covered by that general license, except that such persons using the Mock Iodine-125 described in 180 NAC 3-008.09 item 1.d. must comply with the provisions of 180 NAC 4-039, 4-057, and 4-058.

INSTRUCTIONS

Submit this form in duplicate to the Department of Health and Human Services Regulation and Licensure, Public Health Assurance Division, 301 Centennial Mall South, P.O. Box 95007, Lincoln, Nebraska 68509-5007.

A certification number will be assigned and a validated copy of NRH-17 will be returned.

(Print or Type)

1. Licensee Information

Legal Name: (Physician, Veterinarian, Clinical Laboratory or Hospital) _____

Address: _____

_____

City, State and Zip+4 _____

Person Authorized to sign binding documents for the Licensee _____

2. I hereby apply for a Certificate Number pursuant to 180 NAC 3-008.09 for use of radioactive materials for:

   [ ] a. Myself, a duly licensed physician authorized to dispense drugs in the practice of medicine, or a veterinarian licensed to practice veterinary medicine.

   [ ] b. The above named clinical laboratory.

   [ ] c. The above named hospital.

3. If place of use is different from address in Item 1, please give complete address:

4. Certification:

   I certify that:

   a. All information in this certificate is true and complete.

   b. Appropriate radiation measuring instruments are available to carry out the tests for which radioactive material will be used under the general license of 180 NAC 3-008.09. The tests will be performed only by personnel competent in the use of the instruments and in the handling of the radioactive materials.

   c. I understand that Agency regulations require that any change in the information furnished on this certificate be reported to the Agency within 30 days from the date of such change.

d. I have read and understand the provisions of 180 NAC 3-008.09 of the Agency regulations; and I understand that compliance with those provisions is required as to all radioactive material which is received, acquired, possessed, used, or transferred under the general license for which this certification number is filed with the Agency.

_____

(Signature of Person listed in Item 1.) (Date)

4. To be completed by the Agency:

Certification Number _____ ***Date*** _____

Radioactive Materials Program Manager _____

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NEBRASKA DEPARTMENT OF HEALTH AND HUMAN SERVICES REGULATION AND LICENSURE
DIVISION OF PUBLIC HEALTH ASSURANCE
RADIOACTIVE MATERIALS PROGRAM

CERTIFICATION OF DISPOSITION OF MATERIALS

INSTRUCTIONS - (Use additional sheets where necessary.)
Type or Print except where indicated.
Retain one copy for your files and submit original application to: Department of Health and Human Services Regulation and Licensure, Division of Public Health Assurance, 301 Centennial Mall South, P.O. Box 95007, Lincoln, NE 68509-5007.
Upon approval of this Certification of Disposition of Materials the licensee will receive a termination notice of this radioactive material license.

1. Licensee Information

Licensee Number:_____

License Expiration Date:_____

2. Person to Contact Regarding this Application

_____

Telephone #:_____

Licensee Name and Street Address:

Applicant Name: _____

Address: _____

_____

City, State Zip+4 _____

Telephone #: _____

FAX#: _____

E-mail Address:

3. Materials Data

No Materials have ever been procured or possessed by the Licensee under this License.

All Materials procured and/or possessed by the Licensee under the License Number cited above have been disposed of in the following manner:

Transfer
Specify the date of the transfer, the name of the licensed recipient and the recipient's Agency, NRC or Agreement State license number.
Describe specific materials transfer actions and if there were radioactive wastes generated in terminating this license, the disposal actions, including the disposition of low-level radioactive waste, mixed waste, Greater-than-Class-C waste, and sealed sources, if applicable.

Disposed of directly by Licensee
Describe specific disposal procedures (e.g. decay in storage).

4. Other Data

Our License has not yet expired, please terminate it.
A Radiation Survey was conducted to confirm the absence of licensed radioactive materials and to determine whether any contamination remains on the premises covered by the license:

NO (Attach Explanation)

YES, the results:

Are attached

Were forwarded to the Agency on (Date)_____

4. Other Data *(Continued)*

Address all future correspondence regarding this license to:

Name:

Address:

City, State Zip+4:

Telephone #:

FAX#:

E-mail Address:

5. CERTIFICATION
(This item must be completed by applicant.)

The applicant and any official executing this document on behalf of the applicant named in Item 1., certify that this application is prepared in conformity with the Nebraska Department of Health and Human Services Regulation and Licensure, Title 180, Regulations for the Control of Radiation and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

Applicant Name From Item 1.

By: _____ *Date:* _____
Signature

_____
Print Name and Title of certifying official authorized to act on behalf of the applicant

NEBRASKA DEPARTMENT OF HEALTH AND HUMAN SERVICES REGULATION AND LICENSURE

DIVISION OF PUBLIC HEALTH ASSURANCE – RADIOACTIVE MATERIAL PROGRAM

TRANSFERS OF INDUSTRIAL DEVICES REPORT

(Continue on Form NRH 653, 653A or 653B, as appropriate)

NAME OF VENDOR	REPORTING PERIOD	
	FROM	TO
LICENSE NUMBER:		

For each "person" to whom a devices(s) has been transferred during the reporting period, supply the following:

INTERMEDIATE PERSON (if any)

NAME OF INTERMEDIATE PERSON	NAME OF RESPONSIBLE INDIVIDUAL	TITLE OF RESPONSIBLE INDIVIDUAL	TELEPHONE

GENERAL LICENSEE USER INFORMATION

NAME OF GENERAL LICENSEE USER		MAILING ADDRESS AT THE LOCATION OF USE (No. P.O. Boxes, include Zip Code)
DEPARTMENT		
NAME OF RESPONSIBLE INDIVIDUAL	TELEPHONE	
TITLE OF RESPONSIBLE INDIVIDUAL		

INFORMATION ON DEVICE(S) TRANSFERRED

DATE OF TRANSFER	TYPE OF DEVICE	MODEL NUMBER	SERIAL NUMBER	ISOTOPE	ACTIVITY & UNITS

INTERMEDIATE PERSON (if any)

NAME OF INTERMEDIATE PERSON	NAME OF RESPONSIBLE INDIVIDUAL	INDIVIDUAL TITLE OF RESPONSIBLE	TELEPHONE

GENERAL LICENSE USER INFORMATION

NAME OF GENERAL LICENSEE USER		MAILING ADDRESS AT THE LOCATION OF USE (No. P.O. Boxes, include Zip Code)
DEPARTMENT		
NAME OF RESPONSIBLE INDIVIDUAL	TELEPHONE	
TITLE OF RESPONSIBLE INDIVIDUAL		

INFORMATION ON DEVICE(S) TRANSFERRED

DATE OF TRANSFER	TYPE OF DEVICE	MODEL NUMBER	SERIAL NUMBER	ISOTOPE	ACTIVITY & UNITS

NEBRASKA DEPARTMENT OF HEALTH AND HUMAN SERVICES REGULATION AND LICENSURE

DIVISION OF PUBLIC HEALTH ASSURANCE – RADIOACTIVE MATERIAL PROGRAM

TRANSFERS OF INDUSTRIAL DEVICES REPORT (TO GENERAL LICENSEES)

INTERMEDIATE PERSON (if any)

NAME OF INTERMEDIATE PERSON	NAME OF RESPONSIBLE INDIVIDUAL	TITLE OF RESPONSIBLE INDIVIDUAL	TELEPHONE
NAME OF INTERMEDIATE PERSON	NAME OF RESPONSIBLE INDIVIDUAL	TITLE OF RESPONSIBLE INDIVIDUAL	TELEPHONE

GENERAL LICENSEE USER INFORMATION

NAME OF GENERAL LICENSEE USER		MAILING ADDRESS AT THE LOCATION OF USE (No. P.O. Boxes, include Zip Code)
DEPARTMENT		
NAME OF RESPONSIBLE INDIVIDUAL	TELEPHONE	
TITLE OF RESPONSIBLE INDIVIDUAL		

INFORMATION ON DEVICE(S) TRANSFERRED

DATE OF TRANSFER	TYPE OF DEVICE	MODEL NUMBER	SERIAL NUMBER	ISOTOPE	ACTIVITY & UNITS

INTERMEDIATE PERSON (if any)

NAME OF INTERMEDIATE PERSON	NAME OF RESPONSIBLE INDIVIDUAL	INDIVIDIUAL TITLE OF RESPONSIBLE	TELEPHONE

GENERAL LICENSE USER INFORMATION

NAME OF GENERAL LICENSEE USER		MAILING ADDRESS AT THE LOCATION OF USE (No. P.O. Boxes, include Zip Code)
DEPARTMENT		
NAME OF RESPONSIBLE INDIVIDUAL	TELEPHONE	
TITLE OF RESPONSIBLE INDIVIDUAL		

INFORMATION ON DEVICE(S) TRANSFERRED

DATE OF TRANSFER	TYPE OF DEVICE	MODEL NUMBER	SERIAL NUMBER	ISOTOPE	ACTIVITY & UNITS

NEBRASKA DEPARTMENT OF HEALTH AND HUMAN SERVICES REGULATION AND LICENSURE

DIVISION OF PUBLIC HEALTH ASSURANCE – RADIOACTIVE MATERIAL PROGRAM

TRANSFERS OF INDUSTRIAL DEVICES REPORT (FROM GENERAL LICENSEE)

For each "person" to whom a devices(s) has been transferred during the reporting period, supply the following:

GENERAL LICENSEE USER INFORMATION

NAME OF GENERAL LICENSEE USER	MAILING ADDRESS AT THE LOCATION OF USE (No. P.O. Boxes, include Zip Code)
DEPARTMENT	

INFORMATION ON DEVICE(S) TRANSFERRED

DATE OF TRANSFER	TYPE OF DEVICE	MODEL NUMBER	SERIAL NUMBER	ISOTOPE	ACTIVITY & UNITS

GENERAL LICENSE USER INFORMATION

NAME OF GENERAL LICENSEE USER	MAILING ADDRESS AT THE LOCATION OF USE (No. P.O. Boxes, include Zip Code)
DEPARTMENT	

INFORMATION ON DEVICE(S) TRANSFERRED

DATE OF TRANSFER	TYPE OF DEVICE	MODEL NUMBER	SERIAL NUMBER	ISOTOPE	ACTIVITY & UNITS

GENERAL LICENSE USER INFORMATION

NAME OF GENERAL LICENSEE USER	MAILING ADDRESS AT THE LOCATION OF USE (No. P.O. Boxes, include Zip Code)
DEPARTMENT	

INFORMATION ON DEVICE(S) TRANSFERRED

DATE OF TRANSFER	TYPE OF DEVICE	MODEL NUMBER	SERIAL NUMBER	ISOTOPE	ACTIVITY & UNITS

Form NRH 653B

Effective Date April 12, 2003

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NEBRASKA DEPARTMENT OF HEALTH AND HUMAN SERVICES REGULATION AND LICENSURE

DIVISION OF PUBLIC HEALTH ASSURANCE – RADIOACTIVE MATERIAL PROGRAM

TRANSFERS OF INDUSTRIAL DEVICES REPORT (LABEL CHANGES)

For each device for which required label information has been changed, supply the following::

GENERAL LICENSEE USER INFORMATION

NAME OF GENERAL LICENSEE USER	MAILING ADDRESS AT THE LOCATION OF USE (No. P.O. Boxes, include Zip Code)
DEPARTMENT	

INFORMATION ON DEVICE(S) RECEIVED

TYPE OF DEVICE	MODEL NUMBER	PREVIOUS SERAL NUMBER	NEW SERIAL NUMBER	PREVIOUS ISOTOPE	NEW ISOTOPE	PREVIOUS LABEL ACTIVITY AND UNITS	LABEL ACTIVITYAND UNITS

GENERAL LICENSEE USER INFORMATION

NAME OF GENERAL LICENSEE USER	MAILING ADDRESS AT THE LOCATION OF USE (No. P.O. Boxes, include Zip Code)
DEPARTMENT	

INFORMATION ON DEVICE(S) RECEIVED

TYPE OF DEVICE	MODEL NUMBER	PREVIOUS SERAL NUMBER	NEW SERIAL NUMBER	PREVIOUS ISOTOPE	NEW ISOTOPE	PREVIOUS LABEL ACTIVITY AND UNITS	LABEL ACTIVITYAND UNITS

GENERAL LICENSEE USER INFORMATION

NAME OF GENERAL LICENSEE USER	MAILING ADDRESS AT THE LOCATION OF USE (No. P.O. Boxes, include Zip Code)
DEPARTMENT	

INFORMATION ON DEVICE(S) RECEIVED

TYPE OF DEVICE	MODEL NUMBER	PREVIOUS SERAL NUMBER	NEW SERIAL NUMBER	PREVIOUS ISOTOPE	NEW ISOTOPE	PREVIOUS LABEL ACTIVITY AND UNITS	LABEL ACTIVITYAND UNITS